

STATE OF CONNECTICUT

SITING COUNCIL

* * * * *
 * AUGUST 28, 2012
 THE CONNECTICUT LIGHT & POWER COMPANY * (11:04 a.m.)
 *
 RE: CONNECTICUT PORTION OF THE *
 INTERSTATE RELIABILITY PROJECT * DOCKET NO: 424
 *
 * * * * *

BEFORE: ROBIN STEIN, CHAIRMAN (arrived 12:00 p.m.)
 JAMES J. MURPHY, ACTING CHAIRMAN

BOARD MEMBERS: Colin Tait, Vice Chairman (12:15 p.m.)
 Michael Caron, DPUC Designee
 Daniel P. Lynch, Jr.
 Edward S. Wilensky (12:35 p.m.)
 Philip T. Ashton
 Dr. Barbara Bell

STAFF MEMBERS: Linda Roberts, Executive Director
 Christina Walsh, Siting Analyst
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1 . . .Verbatim proceedings of a hearing
2 before the State of Connecticut Siting Council in the
3 matter of an application by The Connecticut Light and
4 Power Company, Re: Connecticut Portion of the Interstate
5 Reliability Project, held at the offices of the
6 Connecticut Siting Council, Ten Franklin Square, New
7 Britain, Connecticut, on August 28, 2012 at 11:04 a.m.,
8 at which time the parties were represented as
9 hereinbefore set forth . . .

10
11
12 ACTING CHAIRMAN JAMES J. MURPHY: Good
13 morning everyone. I'd like to call this meeting to order
14 Tuesday, August 28, 2012, at approximately 11:00 a.m.

15 My name is James J. Murphy, Jr. I'm a
16 member of the Council. I'm temporary chairing until our
17 Chairman arrives, which will happen in a bit.

18 Other members of the Council here with us
19 today are Michael Caron, the designee for Chairman Arthur
20 House of the Public Utilities Regulatory Authority;
21 Philip T. Ashton; Daniel P. Lynch, Jr.; Dr. Barbara C.
22 Bell.

23 Members of the staff are Linda Roberts,
24 Executive Director; Melanie Bachman, our staff attorney;

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1 Christina Walsh, Supervising Siting Analyst. And the
2 court reporter is Gail Gregoriades.

3 This hearing is a continuation of the
4 evidentiary portion of the proceedings that began on June
5 4th on a CL&P proposal regarding the Interstate
6 Reliability Project.

7 We will proceed in accordance with the
8 proposed agenda, copies of which are available here.

9 A verbatim transcript will be made of each
10 hearing session. And all hearing transcripts will be
11 deposited with the Town Clerks offices of the towns
12 traversed by the project for the convenience of the
13 public.

14 Today the Applicant would like us to take
15 administrative notice of an ISO presentation on the
16 impact of the NEEWS project on Lake Road. Is there any
17 objection to taking administrative notice of that item?
18 If not, it will be so -- we'll take notice of it.

19 The Council also wishes to add two
20 additional administrative notice items. The three -- the
21 administrative notice items are highlighted on the
22 hearing program and marked as Roman Numerals I-D, Items 8
23 and 22. Does any participant have any objection to the
24 last two items being added as administratively noticed?

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1 If not, they will also be added as administratively
2 noticed.

3 As stated in our evidentiary hearing memo,
4 we will begin with the cross-examination of the ISO panel
5 by the Council, parties, and intervenors.

6 And I see --Attorney Macleod, you're here
7 with ISO and with a panel before us. Do you have some
8 items that you'd like to offer for identification?

9 MR. ANTHONY MACLEOD: Yes, thank you, Mr.
10 Chairman -- or Mr. temporary chairman, whichever. At any
11 rate --

12 ACTING CHAIRMAN MURPHY: At least you
13 didn't call me late -- (laughter) --

14 MR. MACLEOD: We do have -- we do have
15 four exhibits that we would like to introduce for
16 identification. The first is a Petition to Intervene,
17 which was filed on July 17, 2012, which has been granted,
18 and I filed that.

19 (Whereupon, ISO New England Exhibit No. 1
20 was marked for identification.)

21 The second is the Pre-filed testimony of
22 Messrs. Stephen Rourke and Brent Oberlin, also dated July
23 17, 2012. And I would like to ask Mr. Oberlin and Mr.
24 Rourke a couple of questions about that, if you would

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1 like?

2 ACTING CHAIRMAN MURPHY: Before we do that

3 --

4 MR. MACLEOD: Would you like for me to
5 move that --

6 ACTING CHAIRMAN MURPHY: -- I don't
7 believe your panel has been sworn.

8 MR. MACLEOD: They have not yet been
9 sworn.

10 ACTING CHAIRMAN MURPHY: Okay. Would you
11 introduce your panel to us, for the people in the public,
12 and for the record.

13 MR. MACLEOD: Certainly. To my immediate
14 left is Mr. Stephen Rourke, who is the Vice President of
15 System Planning of ISO New England, Inc. And to his left
16 is Mr. Brent Oberlin, who is the Director of Transmission
17 Planning of ISO New England. To my right is not a
18 witness, but with me today is Kevin Flynn, who is inside
19 counsel for ISO New England.

20 ACTING CHAIRMAN MURPHY: Would your
21 witnesses stand to be sworn in. Attorney Bachman, if you
22 would please.

23 MS. MELANIE BACHMAN: Please raise your
24 right hand.

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1 (Whereupon, Stephen Rourke and Brent
2 Oberlin were duly sworn in.)

3 MS. BACHMAN: Thank you.

4 ACTING CHAIRMAN MURPHY: Thank you.
5 Attorney Macleod, proceed.

6 MR. MACLEOD: Okay. I would like to
7 submit the exhibits for identification. First is the
8 Pre-filed Testimonies of Messrs. Rourke and Oberlin.

9 (Whereupon, ISO New England Exhibit No. 2
10 was marked for identification.)

11 MR. MACLEOD: I will ask both Mr. Rourke
12 and Mr. Oberlin whether or not the testimony that has
13 been submitted under their names was prepared by them or
14 under their supervision?

15 MR. STEPHEN ROURKE: Yes, it was.

16 MR. BRENT OBERLIN: Yes, it was.

17 MR. MACLEOD: And are you familiar with
18 the facts stated in that testimony?

19 MR. ROURKE: Yes, I am.

20 MR. OBERLIN: Yes.

21 MR. MACLEOD: And do you believe them to
22 be true and correct to the best of your knowledge and
23 belief?

24 MR. ROURKE: Yes, I do.

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1 MR. OBERLIN: Yes, I do.

2 MR. MACLEOD: And as far as the
3 conclusions stated in that testimony, are they based on
4 your professional expertise?

5 MR. ROURKE: Yes.

6 MR. OBERLIN: Yes.

7 MR. MACLEOD: Do you wish to adopt that
8 testimony as your testimony in this proceeding?

9 MR. ROURKE: I do.

10 MR. OBERLIN: I do.

11 MR. MACLEOD: I should ask you are there
12 any changes or modifications to that testimony as filed?

13 MR. ROURKE: No.

14 MR. OBERLIN: No.

15 MR. MACLEOD: Okay. I would move that
16 that be admitted as an exhibit, Mr. Chairman, the pre-
17 filed testimony.

18 ACTING CHAIRMAN MURPHY: Is there any
19 objection by any party to these items being admitted as
20 full exhibits? If not, they're so admitted.

21 (Whereupon, Intervenor ISO New England
22 Exhibit No. 2 was received into evidence.)

23 MR. MACLEOD: Okay. I -- I do have two
24 other items. One, they're both interrogatory responses.

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1 First there was a set of interrogatory responses to the
2 Siting Council's interrogatories. They were submitted
3 August 20, 2012. And they were submitted with Mr. Rourke
4 as the witness.

5 Mr. Rourke, did you prepare or cause the
6 responses to the Siting Council interrogatories of August
7 20th -- did you cause them to be prepared?

8 MR. ROURKE: Yes.

9 MR. MACLEOD: Thank you. Are you familiar
10 with the content?

11 MR. ROURKE: Yes.

12 MR. MACLEOD: Do you believe that the
13 facts stated in those responses are true and correct to
14 the best of your knowledge?

15 MR. ROURKE: Yes, I do.

16 MR. MACLEOD: Okay. And with respect to
17 the interrogatory responses, Item 4, to the Civie
18 Interrogatories, which were submitted by ISO on August
19 27, 2012, were those interrogatory responses prepared by
20 both of you gentlemen?

21 MR. ROURKE: Yes.

22 MR. OBERLIN: Yes.

23 MR. MACLEOD: Are you familiar with the
24 contents in those responses?

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1 MR. ROURKE: Yes.

2 MR. OBERLIN: Yes.

3 MR. MACLEOD: And do you believe the
4 responses to be true and accurate to the best of your
5 knowledge and belief?

6 MR. ROURKE: Yes.

7 MR. OBERLIN: Yes.

8 MR. MACLEOD: Would you like them to be
9 submitted as exhibits in this case?

10 MR. ROURKE: Yes.

11 MR. OBERLIN: Yes.

12 MR. MACLEOD: I would move that the
13 interrogatory responses to both the Council and to the
14 Civies be admitted as full exhibits.

15 ACTING CHAIRMAN MURPHY: Is there any
16 objection to admitting the interrogatory responses of --
17 the interrogatories of 8/20 and the interrogatories by
18 the Civies be admitted as full exhibits? Hearing none,
19 they're so admitted.

20 (Whereupon, Intervenor ISO New England
21 Exhibit No. 3 and No. 4 were received into evidence.)

22 MR. MACLEOD: We don't have any
23 housekeeping, do we?

24 A VOICE: No.

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1 ACTING CHAIRMAN MURPHY: Is your panel
2 ready for cross-examination?

3 MR. MACLEOD: My witnesses are available
4 for cross-examination, Mr. Murphy.

5 ACTING CHAIRMAN MURPHY: Prior to our
6 starting this morning, the Civies had indicated that they
7 have some extensive cross-examination for this panel, and
8 so we have decided that we will start with them rather
9 than with the Council, which is unusual, but we'll --
10 that's the way we're going to start this morning. So Mr.
11 Civies.

12 MR. VICTOR CIVIE: Mr. Chairman and
13 members of the Council, thank you.

14 COURT REPORTER: I'm sorry, can you state
15 your first name?

16 MR. V. CIVIE: Victor. Before I formally
17 begin, I do thank you for sending me the responses to the
18 interrogatories. I have a few questions regarding the
19 interrogatories. The first question deals with -- and it
20 goes back to the solutions report. Are you familiar with
21 Level 3 of that solutions report on page 34?

22 MR. OBERLIN: Yes.

23 COURT REPORTER: Sir, you're going to have
24 to speak louder.

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1 MR. OBERLIN: Sorry. Yes.

2 MR. V. CIVIE: And level -- I'll give you
3 a minute -- excellent. Now at Level 3, what was the Card
4 -- the total Card to Lake Road power when the new
5 proposed Card to Lake Road line was put into service? So
6 just -- just as a review, let me -- let me go back then.
7 The solution was done in steps. There were four levels
8 for the steps. Each step indicated a different stage of
9 the solution and a different line was put in.

10 MR. OBERLIN: Correct.

11 MR. V. CIVIE: Alright. Now at Level 3
12 the Card to Lake Road line was added to the solution.
13 Can you provide me the total current at that time -- or
14 the total power -- let's just stick with power -- the
15 total power at that time that the Card to Lake Road was
16 added to the solution?

17 MR. OBERLIN: And I don't have the
18 interrogatory responses in front of me, but that would
19 have been the answer to one of the later ones.

20 MR. V. CIVIE: Could it be Civie 4A?

21 (pause)

22 MR. OBERLIN: Yeah, the answers provided
23 in -- the answer is provided in Civie 4 --

24 MR. V. CIVIE: Mmm-hmm --

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1 MR. OBERLIN: -- and you're asking about
2 the power flowing from Lake Road to Card Street?

3 MR. V. CIVIE: Mmm-hmm, correct.

4 MR. OBERLIN: So they're listed in the
5 table, in the response.

6 MR. V. CIVIE: Alright. And that's the
7 total power, correct?

8 MR. OBERLIN: These are -- these are
9 providing the watts, which was what was asked for in the
10 interrogatory.

11 MR. V. CIVIE: Mmm-hmm. So -- but between
12 Card Street and Lake Road there's no other power to be
13 considered? This is the total power transmitted between
14 Card Street and Lake Road, correct?

15 (pause)

16 MR. OBERLIN: The reason I needed a second
17 there, this -- actually, the response is a Level 4. The
18 difference is that you have a rebuild of the 328 line in
19 there, which would adjust flows a little bit --

20 MR. V. CIVIE: Mmm-hmm --

21 MR. OBERLIN: -- but I don't think they'd
22 adjust them substantially.

23 MR. V. CIVIE: Alright, that's -- that's
24 fine. Moving along to the New York input, basically

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1 Question 3B, if I -- the prudent solutions, page 20, and
2 it's Table 3-6, for an N11 violation there is no New York
3 input and no Norwalk Cross Cable, and there is values
4 listed here for that. So, I'm assuming that these values
5 would be for an N1 study?

6 MR. OBERLIN: There's actually a
7 difference in the way the table in Table 3-6 was prepared
8 versus what was requested in Civie 3B --

9 MR. V. CIVIE: Mmm-hmm --

10 MR. OBERLIN: -- 3B specifically asks New
11 York to Connecticut. Whereas, Table 3-6 is doing New
12 York to New England, okay --

13 MR. V. CIVIE: Mmm-hmm --

14 MR. OBERLIN: -- so the interrogatory
15 response was only for the portion that is coming into
16 Connecticut.

17 MR. V. CIVIE: Mmm-hmm.

18 MR. OBERLIN: Now there is a difference
19 between what was done for first contingency testing, the
20 N minus 1 testing, and the N minus 1 minus 1 testing.
21 Essentially what happened was between the first
22 contingency and the second contingency, flows to New York
23 were cut, essentially ran it back to zero.

24 MR. V. CIVIE: Okay, thank you. Alright.

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1 In reference to the study, how were the violations
2 ascertained?

3 MR. OBERLIN: They're ran through a
4 program. We used -- I believe this was a combination of
5 PSSE and PTERRA -- and PTERRA made by Power Gen.
6 Anything that is -- I think we were using -- 90 percent
7 of its rating or higher was listed. And in many cases
8 where -- where anything was over a hundred percent of the
9 line rating, we coded in red.

10 MR. V. CIVIE: Did anyone on the panel
11 write the program?

12 MR. OBERLIN: No. Definitely not.

13 MR. V. CIVIE: Did anyone on this panel
14 enter the data for the program?

15 MR. OBERLIN: Specifically on this panel
16 no.

17 MR. V. CIVIE: Did anyone on the panel
18 execute the program?

19 MR. OBERLIN: No.

20 MR. V. CIVIE: In regards to generation
21 then -- and let's take a look at the N11 study. In the
22 study the power assumes to be at peak levels in the
23 summer, correct?

24 MR. OBERLIN: I'm not sure what you mean

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1 by the power.

2 MR. V. CIVIE: The study itself was
3 conducted at peak summer levels?

4 MR. OBERLIN: That's correct.

5 MR. V. CIVIE: Both Millstone 2 and
6 Millstone 3 were out of service for the study, correct?

7 MR. OBERLIN: That's correct -- well in
8 some of the cases.

9 MR. V. CIVIE: We're talking about N11.

10 MR. OBERLIN: Correct, but there were --
11 there was -- different dispatches were used. Some were
12 to stress the system --

13 MR. V. CIVIE: Yeah --

14 MR. OBERLIN: -- moving power from east to
15 west. And some were used to move power from west to
16 east. So Millstone 2 and 3 would have been out in the
17 cases moving power from east to west.

18 MR. V. CIVIE: Okay. If we take a look at
19 page 25 of the needs -- and you alluded to this before --
20 but let's go down to page -- to Table 3-9.

21 MR. OBERLIN: I'm there.

22 MR. V. CIVIE: Alright. What was Table 3-
23 9 then prepared for? That was east to west are you
24 saying?

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1 MR. OBERLIN: Yeah, that's -- that's the
2 east to west transfer. That's why it's described as the
3 Western New England and Connecticut Reliability Dispatch
4 Assumptions.

5 MR. V. CIVIE: Alright, thank you. And
6 could you tell me what the capacity is for Millstone 2
7 and 3?

8 MR. OBERLIN: In rough numbers, you're
9 going to be around twenty-two hundred megawatts --

10 MR. V. CIVIE: It is on the table --

11 MR. OBERLIN: -- total --

12 MR. V. CIVIE: So twenty-two hundred,
13 that's -- that's fine. Twenty-one hundred perhaps?

14 MR. OBERLIN: Okay. Fair enough.

15 MR. V. CIVIE: Alright. In regards to
16 violations then -- and again, we're going east to west --
17 what was the New York input?

18 MR. OBERLIN: For the second contingency
19 it would have been zero.

20 MR. V. CIVIE: Zero. And in the west to
21 east, it was described as if needed. Can you elaborate
22 on that?

23 MR. OBERLIN: When we were moving power
24 west to east, we started with Seabrook out of service and

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1 the Phase 2 HVDC facility out of service, and we began
2 bringing power from western New England to eastern New
3 England. We began bringing up resources in western New
4 England, which we considered available for dispatch.
5 Once we got to the point where we ran out of resources,
6 we would begin picking up flow from New York to provide
7 the necessary amount of power to serve the load.

8 MR. V. CIVIE: So are you saying it's just
9 enough power to allow or ensure that there are no
10 outages, correct?

11 MR. OBERLIN: It's enough power to make
12 sure that we meet the -- generation plus transfer has to
13 equal the load in New England.

14 MR. V. CIVIE: So basically, you're
15 controlling the power from New York, correct?

16 MR. OBERLIN: We're bringing in the power
17 we needed from New York, correct.

18 MR. V. CIVIE: Now in real life, either
19 you bring in all the power or no power, correct --

20 MR. OBERLIN: No --

21 MR. V. CIVIE: -- in New --

22 MR. OBERLIN: -- no. It -- it varies
23 probably by the minute what flows between New York and
24 New England.

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1 MR. V. CIVIE: Sure, but that variable has
2 to do with just general -- the loads and the demands and
3 dispatch. The question -- correct, that demand -- it --
4 it varies for demand, correct?

5 MR. OBERLIN: It's -- actually the ties to
6 New York are usually scheduled ahead of time, so they're
7 usually following a dispatch schedule unless something
8 happens where they need to readjust from there.

9 MR. V. CIVIE: Mmm-hmm. Okay. And what
10 is the capacity of the New York import?

11 MR. OBERLIN: The import can be between
12 twelve and fourteen hundred megawatts.

13 MR. V. CIVIE: Alright. Let's go with
14 fourteen hundred, thank you. There was no Cross Sound
15 import for the study, correct?

16 MR. OBERLIN: For the second contingency -
17 -

18 MR. V. CIVIE: East to west.

19 MR. OBERLIN: East to west there was not.

20 MR. V. CIVIE: And what was the Cross
21 Sound Cable in megawatts capacity?

22 MR. OBERLIN: Its total capacity should be
23 around three-fifty -- I think three-forty-six.

24 MR. V. CIVIE: Three-thirty perhaps?

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1 Correct?

2 MR. OBERLIN: Three-thirty is what can be
3 brought in. You have to account for losses. And there's
4 roughly 16 megawatts losses.

5 MR. V. CIVIE: Alright, so --

6 MR. OBERLIN: And when I say in, into
7 Connecticut.

8 MR. V. CIVIE: Mmm-hmm -- mmm-hmm.
9 Alright. There was no Norwalk Cable import for the
10 study, correct?

11 MR. OBERLIN: For real power as set to
12 zero.

13 MR. V. CIVIE: And the capacity for the
14 Norwalk Cable is 300 megawatts, correct?

15 MR. OBERLIN: Probably better stated as
16 200.

17 MR. V. CIVIE: Alright, 200. And I'm
18 sorry, so what figure do you want to go with for the
19 Cross Sound Cable?

20 MR. OBERLIN: If you're looking at what
21 can actually serve load in Connecticut, I would use the
22 three-thirty.

23 MR. V. CIVIE: Three-thirty?

24 MR. OBERLIN: Yeah.

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1 MR. V. CIVIE: Alright. The Berkshire
2 Plant was off-line, correct?

3 MR. OBERLIN: Correct.

4 MR. V. CIVIE: And --

5 MR. OBERLIN: There was sensitivity
6 testing done with that brought on and West Springfield 3
7 shut off.

8 MR. V. CIVIE: The capacity of the
9 Berkshire Plant is 230 megawatts, correct?

10 MR. OBERLIN: That sounds right -- (pause)
11 -- two-twenty-nine.

12 MR. V. CIVIE: Alright.

13 MR. OBERLIN: Two-thirty in rough numbers.

14 MR. V. CIVIE: All violations involved the
15 330 lines as the initial line outage, correct?

16 MR. OBERLIN: I actually think there's
17 some with the 301 and 302 out as well, but -- for second
18 contingency.

19 MR. V. CIVIE: Mmm-hmm.

20 (pause)

21 MR. OBERLIN: Yeah, the -- the line out as
22 described in Table 5-4, the July 2012 Needs Assessment
23 Update.

24 MR. V. CIVIE: Okay. So if you can, just

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1 indulge me for a bit. Turning to page 37 of the needs
2 report, the second paragraph, all violations involve the
3 330 Lake Road to Card Street as the initial line outage.
4 I -- I'm assuming that applies to your solution,
5 correct?

6 MR. OBERLIN: Two clarifications. (1)
7 This is looking at just the Connecticut aspect of it --

8 MR. V. CIVIE: Mmm-hmm --

9 MR. OBERLIN: -- and not all of the needs
10 from east to west or west to east --

11 MR. V. CIVIE: I understand.

12 MR. OBERLIN: Okay. And you said this was
13 in the solution. I don't understand what that means.

14 MR. V. CIVIE: Well when you were doing
15 those levels for the solution, I'm assuming that that
16 line was out.

17 MR. OBERLIN: We did do testing with that
18 line out as part of our total testing.

19 MR. V. CIVIE: Okay.

20 MR. OBERLIN: There -- there was more than
21 that done though.

22 MR. V. CIVIE: Alright. Now if I'm going
23 to do the math, we have the Cross Sound Cable at about
24 330, the Norwalk Cable 300 -- well no, you said 200,

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1 correct that. Berkshire at 230, New York input fourteen
2 hundred, Millstone twenty-one hundred. If I add these
3 up, I get 4,100 megawatts. Is that correct?

4 MR. OBERLIN: Well subject to check, I'll
5 take your word for it.

6 MR. V. CIVIE: Alright. What federal rule
7 allows you to limit the power in the study by this
8 amount?

9 MR. OBERLIN: I'm -- can you be more
10 specific when you say federal?

11 MR. V. CIVIE: Is there any rule
12 regulation that anticipates a study with this amount of
13 unused capacity?

14 MR. OBERLIN: Okay, we're required to
15 follow NERC standards. And the NERC standards describe
16 that we are supposed to use critical system conditions.
17 They have provided clarifications to two of the NERC
18 standards, TPL2 and TPL3, both of which contemplate
19 generator outages in the base case. If we step through
20 each of these, if you'll look at -- a significant portion
21 of the number that you have there were imports from New
22 York. If you'll look at the ISO's tariff, Attachment K,
23 it describes what resources we would count on. Since
24 we've gone to the forward capacity market structure, we

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1 count on resources that are contractually bound to show
2 up. There are no resources contractually bound to bring
3 us power on a long-term basis from New York to New
4 England. Millstone 2 and 3 are out as our base
5 assumption for large unit outages. We've experienced
6 outages of Millstone 2 and 3 in the past. And Berkshire
7 Power as out to represent a forced outage for the
8 remainder of the generation in eastern New England -- I'm
9 sorry, western New England.

10 MR. DANIEL P. LYNCH, JR.: Mr. Oberlin,
11 could you please speak up. You're fading a little bit
12 here.

13 MR. OBERLIN: Okay. Sorry.

14 MR. V. CIVIE: You referenced a NERC
15 interpretation of the rules.

16 MR. OBERLIN: Yeah.

17 MR. V. CIVIE: Is this the interpretation
18 that you put on your slide show entitled NES COE Criteria
19 Discussion, that is dated October 13, 2011? Let me
20 withdraw that question.

21 MR. OBERLIN: Okay.

22 MR. V. CIVIE: In regards to the NERC
23 interpretation, can you tell me if this is a correct
24 statement; NERC interpreted the rules as follows, quote,

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1 "The selection of credible generation dispatched for the
2 modeling of circuit system conditions is within the
3 discretion of the planning authority?"

4 MR. MACLEOD: May I approach to ask Mr.
5 Civie to identify what he's reading and from where, the
6 page or --

7 MR. V. CIVIE: Yes, sir. This is before
8 the Province of Manitoba, North American Electric
9 Reliability Corporation. This is page 9 of that
10 response. A number of companies want a clarification in
11 regards to what percent -- what role they have. And this
12 was their response in regards to generation dispatch.

13 MR. MACLEOD: I don't think that the
14 witness is in a position to interpret what may have been
15 submitted by NERC in a Canadian province with respect to
16 its standards. So I would respectfully object to that
17 question.

18 MR. V. CIVIE: That's not what I asked.
19 And in addition, he suggested a NERC interpretation of
20 the rules. I'm crossing his question. So if you want,
21 I'll ask him to be more specific? Would you like that?
22 Alright, so --

23 ACTING CHAIRMAN MURPHY: Maybe it would be
24 helpful --

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1 MR. V. CIVIE: So I'll withdraw the
2 question. You suggested before in previous testimony
3 that you used the NERC interpretation of the rules as
4 your guidelines. What were you referring to?

5 MR. OBERLIN: I was referring to the fact
6 that in their interpretation they stated that generator
7 outages should be contemplated as part of the base system
8 and that the transmission planner is responsible for
9 determining appropriate system conditions.

10 MR. V. CIVIE: Mmm-hmm. And where did
11 that come from?

12 MR. OBERLIN: I believe the request
13 actually initially came in from Amerind and Midwest ISO.

14 MR. V. CIVIE: Mmm-hmm. So you don't have
15 an exact quote then for exactly what they said then?

16 MR. OBERLIN: Not in front of me, no.

17 MR. V. CIVIE: No. So then the question
18 that I have to begin with is in regards to a federal rule
19 or regulation, or any federal mandate from NERC
20 suggesting that this much power of 4,100 megawatts of
21 unused capacity can be allowed in a study or supported by
22 a study?

23 MR. OBERLIN: The criteria and standards
24 do not specify a given amount of power to have out of

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1 service. They specify that you study critical system
2 conditions.

3 MR. V. CIVIE: Alright. So then you can't
4 provide me specifically with guidelines in regards to how
5 much power can be used?

6 MR. OBERLIN: I'm not aware that they
7 exist on a national level.

8 MR. V. CIVIE: Alright, thank you. Are
9 you familiar with your rule -- or Section 5-2 of the ISO
10 New England Planning Procedure 5-3?

11 MR. OBERLIN: I don't have it in front of
12 me, but I'm -- I am familiar with the document.

13 MR. V. CIVIE: Alright. Let me read you
14 Rule 5-2 and if you can, tell me if this is correct or
15 not. 5-2, Reasonably Stressed Conditions: Reasonably
16 stressed conditions are those severe load and generation
17 system conditions which have a reasonable probability of
18 actually occurring. Does that sound correct?

19 MR. OBERLIN: Yes, it does.

20 MR. V. CIVIE: Okay. If -- what is the
21 probability of Berkshire, Millstone 2 and Millstone 3
22 both out of service during peak summer times?

23 MR. OBERLIN: I don't know what the
24 probability would be.

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1 MR. V. CIVIE: Okay.

2 MR. OBERLIN: I will say that we've had
3 system events which have been more severe than that in
4 the past.

5 MR. PHILIP T. ASHTON: Mr. Oberlin, keep
6 your voice up please.

7 MR. OBERLIN: Sorry.

8 MR. ASHTON: The room is dead sound-wise,
9 so you --

10 MR. OBERLIN: Okay --

11 MR. ASHTON: -- really have to help us.

12 MR. OBERLIN: Okay.

13 MR. V. CIVIE: It's probably the
14 microphone. Maybe if you'd move it right in front of
15 you.

16 MR. OBERLIN: Okay. I will say that we
17 need to be cognizant of events that have happened in the
18 past. We've had significant outages of generation,
19 including Millstone 2 and 3. We've had other large
20 outages, the loss of entire pump storage units for a
21 thousand megawatts. So, I -- I don't think we can just
22 say that it's not probable and ignore it.

23 MR. V. CIVIE: In (indiscernible)
24 configuration, do you think that Millstone out, Cross

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1 Cable out, Norwalk out, all of New York is out, Berkshire
2 is out, occurring during peak summer times is probable?

3 MR. OBERLIN: I think it's representative
4 of what could happen on the system.

5 MR. V. CIVIE: Alright. Has this
6 condition ever happened?

7 MR. OBERLIN: We have had -- between 1996
8 and essentially mid '98 we had Millstone 2 and 3
9 unavailable at the same time, kind of off to the side,
10 but Millstone 1 and Connecticut Yankee were also forced
11 to shut down at the same time --

12 MR. V. CIVIE: Mmm-hmm --

13 MR. OBERLIN: -- Berkshire Power didn't
14 even exist, so I'm not sure how to answer your question
15 of whether or not that outage occurred, it didn't exist
16 at the time --

17 MR. V. CIVIE: Mmm-hmm --

18 MR. OBERLIN: -- New York, New England --
19 you know, New York gives us what they can. But generally
20 when it's hot in New England, it's pretty hot in New
21 York, and they're looking for help at the same time. So
22 whether or not that's a resource you can count on,
23 especially with no contracts there, we are not counting
24 on it.

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1 MR. V. CIVIE: You're not counting on it,
2 but has it ever happened?

3 MR. OBERLIN: I do not know.

4 MR. V. CIVIE: Alright. Now wouldn't it
5 be more reasonable to evenly distribute the reduced
6 dispatch? That is it appears that everything is coming
7 from the west and it's very concentrated. Wouldn't it be
8 reasonable to evenly distribute the dispatch?

9 MR. OBERLIN: When you say dispatch, are
10 you referring to the outages that were assumed?

11 MR. V. CIVIE: Correct.

12 MR. OBERLIN: No. This is consistent with
13 our current practice where we take a look at the entire
14 generating fleet in a given area. We're looking at all
15 of New England in the study, and not simply little load
16 pockets or something like that. So we felt it would be
17 appropriate to use the dispatches that were assumed in
18 this assessment.

19 MR. V. CIVIE: With the correct
20 combination of generation of line outage, couldn't you
21 pretty much make any line overload? The correct
22 combination of line outage and generation?

23 MR. OBERLIN: I -- I don't know if I can
24 make any line overload.

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1 A VOICE: Yes, you can --

2 MR. MACLEOD: May I ask Mr. Civie to
3 explain what he means by correct as part of that question
4 --

5 MR. V. CIVIE: That is by making the
6 correct generation -- picking generation --

7 ACTING CHAIRMAN MURPHY: He means a
8 combination -- it means a combination of picking and
9 choosing --

10 MR. V. CIVIE: Right, picking and choosing
11 generation, picking and choosing your line outages.

12 MR. OBERLIN: And I'm just thinking of the
13 layout of the network. I think there are probably some
14 lines that I could not force to overload.

15 MR. V. CIVIE: Would the majority of lines
16 be available that you could force to overload?

17 MR. OBERLIN: Probably a select group I
18 could force to overload.

19 MR. V. CIVIE: Alright. What year did the
20 study begin?

21 MR. OBERLIN: Can you define the study?

22 MR. V. CIVIE: Sure. The solution study
23 that's cited in July 2012, the follow-up analysis.

24 MR. OBERLIN: It started in 2012.

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1 MR. V. CIVIE: And what were the figures
2 used in 2012 for the Connecticut power demand?

3 MR. OBERLIN: Could you re-ask that? I
4 don't understand the question.

5 MR. V. CIVIE: Sure. For the Connecticut
6 demand for power, what figures did you use in 2012?

7 (pause)

8 MR. OBERLIN: The gross demand is listed
9 on page 46 of the needs assessment, Table 7-2, but you
10 have to remember that we subtracted out energy efficiency
11 and demand response.

12 MR. V. CIVIE: Mmm-hmm. Could you give me
13 that figure please?

14 MR. OBERLIN: It's going to take me a
15 minute --

16 MR. V. CIVIE: Yeah, take your --

17 MR. OBERLIN: -- it's split out into a
18 number of different blocks, so it all has to be added up
19 in here --

20 MR. V. CIVIE: I see --

21 MR. OBERLIN: -- but the -- the values for
22 the -- how about if I do it this way; the active DRs
23 listed on Table 3-3 on page 20, the forecasted EE for
24 Connecticut is 168 megawatts listed in Table 3-2, and the

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1 FC -- the resources with FCM obligation under the passive
2 DR is found in Table 3-1 on page 19 of 389 megawatts.

3 MR. V. CIVIE: I guess perhaps we -- or
4 you didn't understand the question. What I'm asking for
5 then is -- you had to assume a particular Connecticut
6 demand in regards to the need, the power consumption for
7 Connecticut, correct?

8 MR. OBERLIN: Correct.

9 MR. V. CIVIE: And the total you're saying
10 is five -- about 500 megawatts -- 440?

11 MR. OBERLIN: No, that's not what I said.
12 I said you have to start with -- the way it sits in the
13 system model is you start with a gross demand --

14 MR. V. CIVIE: Mmm-hmm --

15 MR. OBERLIN: -- which is listed on page
16 46 for Connecticut of 8,600 megawatts --

17 MR. V. CIVIE: Okay -- okay, 8,600 --

18 MR. OBERLIN: -- and then we subtract out
19 the future EE --

20 MR. V. CIVIE: Which is --

21 MR. OBERLIN: -- 168 megawatts --

22 MR. V. CIVIE: One-sixty-eight, okay --

23 MR. OBERLIN: -- and the passive DR of 389

24 --

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1 MR. V. CIVIE: Three hundred and eighty-
2 nine. So this brings us down to roughly let's say 8,000
3 megawatts. Is that correct?

4 MR. OBERLIN: Yeah, and then we have to
5 subtract out the active DR. And that's what
6 unfortunately is broken into a chart of a bunch of
7 different pieces that I would have to sit and add up --

8 MR. V. CIVIE: Alright, that -- that's
9 okay --

10 MR. OBERLIN: -- let me see -- we're going
11 to be about -- (pause) -- 300 -- about 350 roughly. So
12 that's going to pull your total number of load serve down
13 to around seventy-six hundred.

14 MR. V. CIVIE: Three-thirty, so seventy-
15 six -- seventy -- or seventy-seven -- alright, that's
16 fine. What were the figures used for total generation?

17 MR. OBERLIN: The total generation was
18 contained in the appendices. What we did in the text of
19 the report itself is we listed what generation was
20 assumed to be unavailable. So, I'd have to sit and add
21 all the generators up in Connecticut to give you that
22 number.

23 MR. V. CIVIE: Okay, perhaps we could save
24 that then for an interrogatory. What year were the

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1 violations observed, that is the N11 violations?

2 MR. OBERLIN: This analysis didn't
3 specifically look at the year of need, yet we know that
4 the -- that some of the violations occur as early as --
5 effectively today because of limited transport capability
6 on the system.

7 MR. V. CIVIE: Mmm-hmm. So you wouldn't
8 be able to provide me with an answer in regards to
9 generation for when the violations occurred, correct?
10 Would you be able to provide me with what Connecticut
11 generation was -- or what -- when the violations
12 occurred?

13 MR. OBERLIN: What the total --

14 MR. V. CIVIE: Yes --

15 MR. OBERLIN: -- Connecticut --

16 MR. V. CIVIE: Right --

17 MR. OBERLIN: -- it's contained in the
18 appendices in the reports that have been submitted. I'd
19 have to sit and add it up.

20 MR. V. CIVIE: Okay. In the study the
21 1280-3 line, Mystic to Whipple were overloaded, correct?

22 MR. OBERLIN: Yes.

23 MR. V. CIVIE: Alright. And one of the
24 questions in the interrogatories I asked was what the

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1 power was through that line. Can you provide that for
2 me?

3 MR. MACLEOD: Do you recall what
4 interrogatory --

5 MR. V. CIVIE: Certainly. It was in 3A.

6 MR. MACLEOD: Okay.

7 MR. OBERLIN: It would be 284 million
8 watts since the request was made to provide the answer in
9 watts.

10 MR. V. CIVIE: I believe you have -- that
11 was --

12 MR. ASHTON: Excuse me. Mr. Oberlin, may
13 I inquire? The question did ask for watts.

14 MR. OBERLIN: Correct.

15 MR. ASHTON: Is it conventional to speak
16 of watts flow on a transmission line or a generator or is
17 it megawatts or kilowatts?

18 MR. OBERLIN: Traditionally we use
19 megawatts because of the volume of power that we're
20 typically talking about. So this would be 284 megawatts.

21 MR. ASHTON: I read the answer to the
22 question and I kind of sat back and wondered. So it's -
23 -

24 MR. V. CIVIE: Okay -- actually, I believe

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1 that figure referred to the LTE -- and I'm sorry, there
2 were two responses. Can you look at 3A-a-i. There were
3 two labeled 3A.

4 MR. OBERLIN: Yeah, I'm sorry. Okay, so
5 there were -- there were three different base cases used
6 in east to west and west to east and Rhode Island and
7 they varied from 45 megawatts to 176.5 megawatts.

8 MR. V. CIVIE: Okay. In regards to the
9 study, the Mystic 1465 lines were overloaded, correct?

10 MR. OBERLIN: Yes, they were.

11 MR. V. CIVIE: And what was the power in
12 the lines at that time? And again the same --

13 MR. OBERLIN: When they were overloaded or
14 in the base --

15 MR. V. CIVIE: When they were overloaded.

16 MR. OBERLIN: Well it's going to be 127
17 percent of 284. I don't have a calculator in front of
18 me.

19 MR. V. CIVIE: Alright. So going back to
20 the first question then when I asked in regards to the
21 power going through at the time of the violation then,
22 you gave me an answer that was below 284 megawatts. So,
23 I'm assuming you're revising it and you're saying that
24 it's 123 percent than above -- 127 percent above --

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1 MR. OBERLIN: The 1465 is overloaded in
2 Table 5-2 of the needs assessment to 127 percent of its
3 rating of 284 megawatts.

4 MR. V. CIVIE: Alright, so let's go back
5 to the Mystic to Whipple power lines then. So what is
6 the overload on the Mystic to Whipple line?

7 (pause)

8 MR. OBERLIN: Okay. It's 150 percent of
9 284 megawatts.

10 MR. V. CIVIE: Which comes out to about --

11 MR. OBERLIN: Four-twenty -- four-thirty -

12 -

13 MR. V. CIVIE: One-forty-two perhaps?

14 MR. OBERLIN: No. It would have to be
15 greater than 284 --

16 MR. V. CIVIE: Right, because it's -- it's
17 150 of 284.

18 MR. OBERLIN: Yes.

19 MR. V. CIVIE: Okay. We'll just go with
20 that 150 percent. Alright, so you don't have the actual
21 current figure then? The violations that you showed in
22 this table actually --

23 COURT REPORTER: One -- one moment please.

24 (pause - tape change)

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1 MR. V. CIVIE: Alright. So, I'm not sure
2 then in your response to my interrogatories -- I asked
3 what the power transmitted and the directions from the
4 line studied were that were in violation and you provided
5 this table. And this table provides values that are
6 under the LTE. So am I assuming then that this table was
7 incorrect?

8 MR. OBERLIN: Well the table is not
9 incorrect. Let me come back to the question here --
10 (pause) -- the question asked is provide the transmitted
11 power in watts and directions of the line studied --

12 MR. V. CIVIE: Mmm-hmm -- well -- and I
13 don't mean to interrupt you there, but it also says in
14 reference to any line violations regarding the follow-up
15 analysis, correct?

16 MR. OBERLIN: Correct. So the line
17 violations appear in Table 5-2 -- well in the tables in
18 5-1, 5-2, 5-3, etcetera, and the needs assessment, and we
19 gave you the line rating. So it would be multiplying the
20 two together.

21 MR. V. CIVIE: Alright. So what does this
22 table address then? What power ratings are given in this
23 table?

24 MR. OBERLIN: Can you specify what this

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1 table is?

2 MR. V. CIVIE: The table we're referencing
3 in 3A, A1 --

4 MR. OBERLIN: The -- the second table in
5 that response?

6 MR. V. CIVIE: Right. The ISO response
7 table --

8 MR. OBERLIN: That's --

9 MR. V. CIVIE: -- that you provide in 3A-
10 I.

11 MR. MACLEOD: Is this 1 of 2 or 2 of 2 --

12 MR. V. CIVIE: 1 of 2.

13 MR. MACLEOD: Thank you.

14 MR. OBERLIN: Those are base system
15 conditions prior to applying contingencies.

16 MR. V. CIVIE: Okay, so they don't include
17 the violation?

18 MR. OBERLIN: That's correct. We provided
19 the line rating on the second table on page 2 of 2 and
20 the -- and the percentage overload is listed in each of
21 the tables in the needs assessment --

22 MR. V. CIVIE: Mmm-hmm --

23 MR. OBERLIN: -- so it would just be a
24 matter of multiplying them together.

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1 MR. V. CIVIE: Alright. Moving on -- so
2 basically in regards to the wattage then, can you tell me
3 what 150 percent of 284 is?

4 MR. OBERLIN: It should be around four-
5 twenty, four-thirty.

6 MR. V. CIVIE: Four hundred and thirty
7 megawatts?

8 MR. OBERLIN: Yes. Actually the MVA.

9 MR. V. CIVIE: Alright. If I subtract 284
10 from that -- let's say you subtract 285 from that, are we
11 looking at 145 megawatts?

12 MR. OBERLIN: That sounds about right.

13 MR. V. CIVIE: Alright. So are there any
14 other violations in Connecticut aside from those two
15 lines?

16 (pause)

17 MR. OBERLIN: Yes. There's the -- Table
18 5-2 shows the 1870 line between Chinook and Wood River.

19 MR. V. CIVIE: Does Wood River service
20 Connecticut?

21 MR. OBERLIN: It's a line that traverses
22 between the two states.

23 MR. V. CIVIE: I understand. Does any
24 Connecticut resident get power from Wood River?

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1 MR. OBERLIN: Power can flow either into
2 or out of Connecticut across that line.

3 MR. V. CIVIE: Let's say the line was
4 severed, would any -- and everything was working
5 functionally in Connecticut. Would a Connecticut person
6 lose service?

7 MR. MACLEOD: Can you tell -- I guess I'm
8 going to ask for a little more specificity. Would you be
9 able to suggest where the line might be severed in your
10 hypothesis?

11 MR. V. CIVIE: Well the line we're talking
12 about, Chinook to Wood River, near the line -- anywhere
13 in the line.

14 MR. MACLEOD: I don't know whether it
15 makes a difference in the witness's response, that's all.

16 MR. OBERLIN: Ignoring any configuration
17 issues at Chinook, no.

18 MR. V. CIVIE: Alright. Going back just
19 in general to the power, now if you'll take a look at
20 those two lines, isn't Millstone directly west of these
21 lines?

22 MR. OBERLIN: Geographically.

23 MR. V. CIVIE: Well how about
24 electrically?

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1 MR. OBERLIN: There's no direct east to
2 west path between them. You've kind of got to come up
3 and over and back down to get there.

4 MR. V. CIVIE: So would it be correct to
5 say that after the 283 line, we would go to the 1280-1
6 line through Montville, and then through Montville we
7 have Millstone?

8 MR. OBERLIN: I'm sorry, I got lost in the
9 beginning of your question because you started with the
10 283 line --

11 MR. V. CIVIE: So we're going to start
12 with the --

13 MR. OBERLIN: -- and I don't know what
14 that is --

15 MR. V. CIVIE: -- we're going to start
16 with the Mystic lines, the Mystic lines to Whipple,
17 Whipple goes right to Montville, and then Montville goes
18 directly to Millstone 2 and 3, correct?

19 MR. OBERLIN: Yeah, 345-kV, correct.

20 MR. V. CIVIE: Alright. So electrically
21 Millstone is almost directly west of these lines,
22 correct?

23 MR. OBERLIN: I'm hung up on the term
24 directly. It is -- it is on the receiving end the way

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1 you phrased the question.

2 MR. V. CIVIE: Okay. So we've limited the
3 power. We've limited the capacity basically of that
4 forty-one hundred megawatts and we took out the two
5 Millstones on the left side of the lines -- on the west
6 side of the lines. Don't you think the study is biased
7 because everything is concentrated on the left and the
8 west side?

9 MR. OBERLIN: No, I don't. You'll find
10 that of the distribution factor of the 345-kV network in
11 Connecticut there's not a whole lot of difference between
12 the location of one bus on the 345-kV versus another.
13 There are going to be -- there are differences, but
14 they're pretty small.

15 MR. V. CIVIE: We have 145 --

16 MR. ROURKE: May I just --

17 MR. V. CIVIE: Sure, go ahead --

18 MR. ROURKE: -- can I just -- just add on
19 for a second --

20 MR. V. CIVIE: No problem --

21 MR. ROURKE: -- because I think you're --
22 you know, when you think about the studies, which we've
23 done, which as Brent said earlier we looked at the
24 stress both east to west in the system and also west to

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1 east --

2 MR. V. CIVIE: Mmm-hmm --

3 MR. ROURKE: -- I think there's a --
4 there's a lot of history here that's actually worth going
5 through, you know, all the way back to the late 80's,
6 really right through now. When you think about these
7 studies, you know, why would we put lots of stresses in
8 the west or why would we put lots of stresses in the
9 east, are they probable, can they occur, so certainly
10 going back to the late 80's and then right in through the
11 90's, we actually had many years where we -- where we
12 experienced sort of a long run of chronic forced outages
13 of generators in the eastern side of the system where we
14 really sat at these limits almost 24 hours a day to push
15 power from the western half of the region to the eastern
16 half of the region, and we -- certainly we operated that
17 way for many years.

18 Getting into the late 90's when the
19 nuclear power plants down in Connecticut were shut down,
20 shut down for almost two years, two and a half years, we
21 sort of chronically sat at exactly the opposite side of
22 this issue for years really with the system being
23 stressed from the east, trying to move power to the west.
24 And in that case more specifically, it was not only east

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1 to west, but also to get power into Connecticut. And we
2 sat at those limits, really on the flip side of what we
3 had experienced for almost 10 years with really -- with
4 lots of outages in the west, high stress on the system
5 going from east to west.

6 So you know, with -- sort of with that
7 history in mind and then if you unpack -- and I'll use
8 your forty-one hundred value, which included the ability
9 to perhaps bring power in from New York State on the
10 northern ties, plus the ties with Long Island, we -- as
11 Brent noted earlier, on the northern ties there are no
12 long-term commitments to the region to bring power in
13 from -- from New York there. One way for the ISO to get
14 it would be to go into the procedures we have to buy
15 emergency power from our neighbors. But we don't plan
16 the system to go into those actions. Those are really
17 left there for when the operators have a dire need that
18 they're faced with in real time to sort of take that
19 action. So as we look out for 10 years, we don't plan
20 the system to sort of force the operator's hand to go
21 there.

22 When you look at the ties to Long Island,
23 if you stare at the data, if anything, those lines are
24 flowing to Long Island pretty much 24 hours a day, 365

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1 days a year. And you know, they -- there's -- there's --
2 there's -- there are certainly very high loads on Long
3 Island at the same time we would be experiencing our
4 summer peak load here. They rely on the exports from us
5 to them to serve their load. So the probability of
6 getting assistance from them when we might need it at the
7 same time that they would need it, as we've seen in the
8 past, is very low. We would argue non-existent. So to -
9 - to model those as zero and to not assume assistance
10 from New York on the northern ties is -- is consistent
11 with things that we've seen in the past, it's consistent
12 with our tariff and with our rules.

13 So -- so this -- this study when we looked
14 at needs in the west, which we've seen in the past for
15 years, we did -- and we do this for all our studies, we
16 do bias the outages on that side to see what the system
17 looks like, and these overloads came out of that. In --
18 in this assessment we certainly did the same thing when
19 you looked at it on the eastern side of the issue because
20 we saw those for many, many years as well. So you know,
21 that -- that forty-one hundred number sounds like a
22 really big number, but when you unpack it, it really
23 boils down to, you know, two or three generators out in a
24 very large load pocket in the west or two or three

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1 generators out in a very load pocket -- a very large load
2 pocket in the east. With the data that we've seen, you
3 know, going back through years, when you look at the
4 amount of outages that occur at the time of the peak
5 during the summer, the numbers, you know, sort of range
6 between 2,000 to 4,000 megawatts out of service. It's a
7 range of total forced outages, lots of D rates, ambient
8 air temperature, lack of cooling water, other
9 environmental restrictions, low hydro, you know, a whole
10 host of things. So these -- these numbers -- these
11 outages rather really do fall in line with sort of the
12 history we've experienced on these interfaces for, you
13 know, at least the last 25 years now.

14 MR. V. CIVIE: So your argument is based
15 on what normally happens then, correct?

16 MR. ROURKE: Well it's -- it's based on
17 our -- on our experience of how the system is typically
18 stressed, how we've seen it be stressed --

19 MR. V. CIVIE: Mmm-hmm --

20 MR. ROURKE: -- when we get into the
21 summer peak conditions. We've really kind of lived
22 through most, if -- if not all of these experiences.

23 MR. V. CIVIE: Of course. But this is a
24 different condition. I mean we have forty-one hundred

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1 megawatts out, correct?

2 MR. ROURKE: No, I -- actually, I would
3 say no. The fourteen hundred megawatts from -- from New
4 York right at the moment is not contractually available
5 to the region --

6 MR. V. CIVIE: Mmm-hmm --

7 MR. ROURKE: -- only available to the
8 region if we go into emergency actions if they have it -
9 -

10 MR. V. CIVIE: Mmm-hmm --

11 MR. ROURKE: -- no -- no commitment on
12 their side that they would have it. The same is true for
13 the -- I think you used 330 megawatts for Cross Sound
14 Cable --

15 MR. V. CIVIE: Mmm-hmm --

16 MR. ROURKE: -- and 200 for the Norwalk
17 Cable --

18 MR. V. CIVIE: Mmm-hmm --

19 MR. ROURKE: -- so for that 530 megawatts
20 the same would be true. Certainly no -- no -- no
21 commitment to get it to us. They would certainly make
22 best efforts in any emergency to support us. But again,
23 we don't plan the system to go into emergency actions.

24 MR. V. CIVIE: Right. So they would -- if

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1 there's an emergency need, they would make efforts to
2 give us the power?

3 MR. ROURKE: Just like we would make
4 efforts to give it to them.

5 MR. V. CIVIE: Alright. So back to where
6 we were, we have 145 megawatts we're looking for. If we
7 used some of that unused capacity and we used enough of
8 that unused capacity, would the violations possibly
9 vanish?

10 MR. OBERLIN: No. And the reason I say
11 that is if you look at Table 5-2 and the needs
12 assessments --

13 MR. V. CIVIE: Mmm-hmm --

14 MR. OBERLIN: -- there are violations on
15 the same lines going the other way from west to east when
16 you have the Millstone units on. So you're kind of in a
17 Catch 22.

18 MR. V. CIVIE: Alright. What violations
19 are going from west to east that you're talking about?

20 MR. OBERLIN: It's everything in Table 5-
21 2. And actually the values I was giving you before when
22 you were just asking the magnitude of the overloads, and
23 those are some of the highest.

24 MR. V. CIVIE: Alright. You're looking at

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1 5-2 from what report?

2 MR. OBERLIN: The needs assessment, page
3 40.

4 MR. V. CIVIE: Page 40, we'll go there, 5-
5 2. Okay. What Connecticut violations fit that
6 description?

7 MR. OBERLIN: The same ones we had talked
8 about before.

9 MR. V. CIVIE: Alright. Just those two.
10 And there were violations going --

11 MR. OBERLIN: Those three.

12 MR. V. CIVIE: The -- three --

13 MR. OBERLIN: The -- well --

14 MR. V. CIVIE: -- if you count Wood River?

15 MR. OBERLIN: Correct.

16 MR. V. CIVIE: Alright. So basically
17 then, with the Millstones intact, there were those
18 violations, that is those two Connecticut violations were
19 there with the Millstones intact?

20 MR. OBERLIN: I'll keep saying three
21 violations. That's correct.

22 MR. V. CIVIE: Alright, that's -- that's
23 fine. Alright. So how about if we just say that affect
24 Connecticut, would that be suitable for you? The two

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1 that affect Connecticut, is that correct?

2 MR. OBERLIN: Well, I mean it's -- it's a
3 line -- it's a transmission line that has equipment
4 existing in Connecticut. I cannot overload it.

5 MR. V. CIVIE: Alright. So if we have
6 Millstone 2 and Millstone 3 on, then the power is
7 reversed, correct?

8 MR. OBERLIN: In the dispatches we've set
9 up, correct.

10 MR. V. CIVIE: Mmm-hmm -- alright. So
11 when the power was reversed, how much power was there?

12 MR. OBERLIN: I might be confused by where
13 we are in the reverse to the reverse to the reverse here
14 --

15 MR. V. CIVIE: Well on that table, as you
16 pointed out, it lists a certain percentage. Let's take a
17 look at Whipple -- Whipple to Mystic. What are the
18 conditions for that violation?

19 MR. OBERLIN: That is a transfer from
20 western New England to eastern New England.

21 MR. V. CIVIE: And is Millstone 2 and 3 in
22 operations?

23 MR. OBERLIN: They are on, correct.

24 MR. V. CIVIE: They are on, okay. Now

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1 going back then and finishing up what I was saying, at
2 the risk of being redundant, and I apologize to Mr.
3 Ashton if I am, why change the Card to Lake Road 330
4 lines, which I'm assuming you haven't recorded any
5 violations, correct, on those lines, the Card to Lake
6 Road lines, the 330 lines that currently exist?

7 MR. OBERLIN: I do not see them reported.

8 MR. V. CIVIE: So why change the Card to
9 Lake Road 330 lines, which have no violations in the
10 north part of the state, when the problem lies on the
11 other side of the state on the shore? That -- that is
12 why not just upgrade the Mystic lines where the problem
13 lies?

14 MR. OBERLIN: The cause of the -- one of
15 the significant causes of the Mystic lines overloading is
16 the outage of the 330 line. So one way to address that
17 is to build a parallel line. Essentially then you're
18 using your 115-kV to serve local load and using your 345-
19 kV to move power.

20 MR. V. CIVIE: That's one way, but what I
21 asked was why not just upgrade the Mystic line?

22 MR. OBERLIN: Because it's not the only
23 issue that we're trying to solve here. You would have to
24 do numerous overload -- I mean upgrade after upgrade

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1 after upgrade to obviate the need for the 345-kV lines.

2 MR. V. CIVIE: Alright. But in regards to
3 the two Connecticut violations, that would solve that
4 problem, correct, if we upgraded the Mystic lines?

5 MR. OBERLIN: I believe there's still some
6 voltage issues to be addressed in that area.

7 MR. V. CIVIE: Okay. But at least from
8 the power side of things everything would be fine,
9 correct, there would be no violations if we upgraded
10 those two lines -- or three lines?

11 MR. OBERLIN: If you could actually
12 upgrade them to handle that amount of power, you would
13 have eliminated the violation.

14 MR. V. CIVIE: Are you familiar with
15 special protection systems?

16 MR. OBERLIN: Yes, I am.

17 MR. V. CIVIE: Does Wood River contain a
18 special protection system?

19 MR. OBERLIN: Not at this time, no.

20 MR. V. CIVIE: When Wood River was put in
21 initially, do you recall what the -- I'm going to
22 rephrase that. Alright. So what you're telling me is
23 Wood River has no special protection system, correct?

24 MR. OBERLIN: That's in service? I do not

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1 believe there is one.

2 MR. V. CIVIE: Does Chinook have a special
3 protection system?

4 MR. OBERLIN: I do not believe there is
5 one in service.

6 MR. V. CIVIE: And what about Mystic?

7 MR. OBERLIN: I do not believe there is
8 one in service.

9 MR. V. CIVIE: Alright. In regards then
10 in general to need, I'd like to turn -- to go back to
11 page 34, solutions. Alright. On page 34 then we're
12 discussing the levels. The proposed solution was
13 implemented in steps, which are referred to as levels,
14 correct?

15 MR. OBERLIN: That's correct.

16 MR. V. CIVIE: The first level, the new
17 Millbury to West Farnum lines were added, correct?

18 MR. OBERLIN: Correct.

19 MR. V. CIVIE: And the second level, the
20 new Lake Road to West Farnum lines were added, correct?

21 MR. OBERLIN: Correct.

22 MR. V. CIVIE: And the third level, the
23 new proposed Card Street to Lake Road line was included,
24 correct?

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1 MR. OBERLIN: That's correct.

2 MR. V. CIVIE: And do you recall what you
3 provided me for a current was on that power -- the power
4 value on that when it was added?

5 MR. OBERLIN: No. I'd -- I'd have to look
6 again.

7 MR. V. CIVIE: Okay. It was in -- you
8 suggested it was on -- let's go back to solutions --
9 Civie 4A-I and the solutions question -- this is page 1
10 of 1 -- 330 -- it says east to west seven hundred and
11 seven --

12 MR. OBERLIN: Right. The values ranged
13 from 79 megawatts to 707 megawatts.

14 MR. V. CIVIE: Alright. And at that time
15 when that was added, the 330 line was out of service,
16 correct?

17 MR. OBERLIN: No, that's not correct.

18 MR. V. CIVIE: That's not correct?

19 MR. OBERLIN: No, this would be a base
20 system. This is not a contingency. That's why it says
21 above the response the base -- or above the table, base
22 loading on the lines.

23 MR. V. CIVIE: Mmm-hmm.

24 MR. OBERLIN: Having the 330 out is a

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1 contingency that we test --

2 MR. V. CIVIE: Mmm-hmm --

3 MR. OBERLIN: -- either as a first or
4 second. It's not a base system condition.

5 MR. V. CIVIE: Alright. So prior to this
6 then, what was the current going through -- the current
7 going through the 330 line was that. And what I asked
8 you was what the total power was coming from Card to Lake
9 Road streets. And that's the value you gave me for the
10 total power. So let me ask you that question again;
11 what is the total power going from Lake Road to Card
12 Street?

13 MR. OBERLIN: Under what condition?

14 MR. V. CIVIE: The first question I asked;
15 Level 3, when the Card to Lake Road new proposed line was
16 added.

17 MR. OBERLIN: Your question didn't ask
18 about the new line that was added, so you'd have to
19 essentially double what is on the 330 line there. So
20 you'd have roughly a high of fourteen hundred -- four
21 hundred and -- fourteen hundred and fifteen megawatts --

22 MR. V. CIVIE: So --

23 MR. OBERLIN: -- 1,415 megawatts.

24 MR. V. CIVIE: Fourteen hundred megawatts.

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1 MR. OBERLIN: Yep. As a -- as a high.

2 MR. V. CIVIE: Okay.

3 MR. ROURKE: In the --

4 MR. OBERLIN: Yep.

5 MR. V. CIVIE: Thank you. Alright. So
6 first then, let's take a look at page 37.

7 MR. MACLEOD: Of the solutions --

8 MR. V. CIVIE: Of the solutions study.

9 And we'll start out with Table 6-4. On page 37, Table 6-
10 4 lists the first level results after the new Millbury to
11 West Farnum line were added, correct?

12 MR. OBERLIN: That's correct.

13 MR. V. CIVIE: Table 6-5 are the Level 2
14 results after the new Lake Road to West Farnum lines are
15 added, correct?

16 MR. OBERLIN: In addition to the line from
17 --

18 MR. V. CIVIE: In addition --

19 MR. OBERLIN: -- yes --

20 MR. V. CIVIE: -- to the --

21 MR. OBERLIN: -- to Level 1 --

22 MR. V. CIVIE: -- to Level 1.

23 MR. OBERLIN: Correct.

24 MR. V. CIVIE: And this is prior to the

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1 Card to Lake Road street lines were added, correct?

2 MR. OBERLIN: That is correct.

3 MR. V. CIVIE: Alright. As we see here,
4 those two circuits, Whipple to Mystic and -- was the
5 second one there -- I guess it's not -- so do we see any
6 violations there that affect Connecticut in Table 6-5?

7 MR. OBERLIN: No. But I'd caution you'd
8 need to look at the system as a whole and not just
9 Connecticut.

10 MR. V. CIVIE: Okay. But adding -- going
11 from Table 6-4 to 6-5, we no longer have those problems
12 in Connecticut, correct?

13 MR. OBERLIN: Again, I agree the
14 Connecticut issue has been resolved, but the system
15 network issue has not been resolved.

16 MR. V. CIVIE: Okay. Now moving along
17 then, if we take a look then at Table 6-6, Level 3
18 results after the new proposed Card to Lake Road lines
19 were added, we can see that there is no significant
20 difference between Table 6-5 and Table 6-6 in regards to
21 the Connecticut lines, correct?

22 MR. OBERLIN: Sorry, can you ask that
23 again? I was actually still thinking of your last answer
24 --

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1 MR. V. CIVIE: No problem. You'll have
2 another change to address it --

3 MR. OBERLIN: If I could, the last one I
4 said --

5 MR. V. CIVIE: So take a look at Table 6-
6 5. Prior to the lines -- prior to the new proposed Card
7 to Lake Road lines being added, and we look at Table 6-6
8 after the new proposed Card to Lake Road lines have been
9 added, it doesn't appear there's any significant
10 difference in Table 6-5 and 6-6, correct?

11 MR. OBERLIN: That's correct.

12 MR. V. CIVIE: So basically doesn't this
13 study prove that the new proposed Card to Lake Road
14 street lines are not needed for Connecticut's service?

15 MR. OBERLIN: Again you need to look at
16 this from a New England perspective. If you'll look at
17 Table 6-9 and 6-10 --

18 MR. V. CIVIE: Well, we'll -- we'll be
19 getting there --

20 MR. OBERLIN: Okay --

21 MR. V. CIVIE: -- but I'm just --

22 MR. MACLEOD: Well, I'd like him to be
23 able to answer your question --

24 MR. V. CIVIE: That's fine --

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1 MR. MACLEOD: -- and he -- he's doing it -

2 -

3 MR. V. CIVIE: Well, I don't think so.

4 He's misdirecting it, but that's fine.

5 MR. MACLEOD: Well he has something to add

6 --

7 MR. V. CIVIE: And -- and I'm not going to
8 limit him, that's -- that's fine. So again, let me just
9 repeat the question and you can answer it the way you
10 wish. Since Table 6-5 and Table 6-6 have not changed
11 after the new proposed Card to Lake Road lines were
12 added, does that -- doesn't that mean that in regards to
13 the Connecticut lines or the Connecticut service, that
14 the new proposed Card to Lake Road lines are not needed?

15 MR. OBERLIN: It just means for the cases
16 where we're importing into eastern New England you did
17 not need that line.

18 MR. V. CIVIE: Mmm-hmm. And we're talking
19 about the two lines -- or at least the main line of
20 Whipple to Mystic, correct?

21 MR. OBERLIN: Those are the two you've
22 focused on, correct.

23 MR. V. CIVIE: Alright.

24 MR. ROURKE: And I think -- maybe just to

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1 add here and Brent has tried to make this point, we don't
2 -- and I know you do, but we don't actually see state
3 lines when we do our studies --

4 MR. V. CIVIE: I understand --

5 MR. ROURKE: -- we're -- we're responsible
6 to do these studies for the whole region. This -- this
7 project as we see it is -- is critical really to three
8 states -- actually to all six states, but obviously it's
9 going to be -- if it goes forward, it will be built in
10 three states and will be critical to load serving at a
11 minimum in all -- in all three of those states. It
12 brings lots of benefits to the whole -- to the whole
13 total area --

14 MR. V. CIVIE: Mmm-hmm --

15 MR. ROURKE: -- as I noted just to -- you
16 know, past the needs, which have been identified here to
17 optimize the flow of power east to west and west to east
18 in the region. So -- I mean we -- we understand you have
19 a distinction for this state. It's not a distinction
20 that we ever think about when we're doing our study. We
21 just -- we just study the whole region.

22 MR. V. CIVIE: Alright. Going back then
23 to the table you responded to in the interrogatories that
24 was Table 3A, page 2 of 2, which gives the long-term

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1 emergency ratings, what is the long-term emergency rating
2 for the 330 Lake Road to Card Street?

3 MR. OBERLIN: One-thousand nine-hundred
4 and twelve MVA.

5 MR. V. CIVIE: If we go back then to your
6 response in regards to -- you multiplied the total, that
7 is -- let me rephrase that. You previously answered that
8 the total power going from Lake Road to Card Street, and
9 that's a total power counting two lines, was fourteen
10 hundred megawatts. The Lake Road to Card Street existing
11 line can take 1,942 megawatts. So doesn't the study
12 prove that we don't even need the line under any
13 circumstances?

14 MR. OBERLIN: There's two issues here.
15 One is that the value I've provided you is a base case
16 value, that means prior to applying any contingencies.
17 The second is one of the limiting contingencies is loss
18 of the parallel line, so all of that flow ends up on the
19 other line.

20 MR. V. CIVIE: So what you're saying is
21 that if there's a line out, then it would be nice to have
22 a second line, correct?

23 MR. OBERLIN: It's necessary to have a
24 second line.

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1 MR. V. CIVIE: It's necessary because
2 why?

3 MR. OBERLIN: Because we have criteria
4 violations that need to be addressed.

5 MR. V. CIVIE: Alright. So it's based on
6 your criteria and not based on the power output,
7 correct?

8 MR. OBERLIN: The overloads that we're
9 seeing on these transmission elements are a function of
10 the power they're carrying.

11 MR. V. CIVIE: When is the last time the
12 330 line broke down, it was out of service?

13 MR. OBERLIN: I know it tripped about
14 three weeks ago --

15 MR. V. CIVIE: Okay --

16 MR. OBERLIN: -- that's probably the most
17 recent event.

18 MR. V. CIVIE: Alright, so --

19 MR. OBERLIN: I'm sorry -- I'm sorry,
20 that's not correct. I'm thinking of the 347. I actually
21 don't know on the 330.

22 MR. V. CIVIE: Alright. So let me
23 understand this then. The 330 line as it is can handle
24 the power. There's no violations on the 330 line. Yet,

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1 you insist that a second line is needed, correct?

2 MR. OBERLIN: Correct.

3 MR. V. CIVIE: I don't have any further
4 questions. Do you? Alright, I'm finished. Thank you.

5 CHAIRMAN ROBIN STEIN: Okay. We'll now go
6 to the Applicant. Do you have any cross-examination, any
7 questions?

8 MR. ANTHONY FITZGERALD: Not at this time.

9 CHAIRMAN STEIN: Okay. NRG Companies?

10 A VOICE: No questions.

11 CHAIRMAN STEIN: EquiPower Resources
12 Corp.? I believe they're here.

13 A VOICE: No questions, thank you.

14 CHAIRMAN STEIN: United Illuminating?

15 MR. BRUCE MCDERMOTT: No questions, thank
16 you.

17 CHAIRMAN STEIN: Edward Hill Bullard? The
18 Office of Consumer Counsel? Richard Cheney and the
19 Highland Ridge Golf Range? Mount Hope Montessori School?
20 We'll now go back to staff.

21 MS. CHRISTINA WALSH: Thank you, Mr.
22 Chairman. I just have probably a couple of questions
23 left over.

24 Just -- referring to the presentation from

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1 the Planning Advisory Committee from July, one of the
2 first slides describes -- the updated needs assessment
3 includes the forecasted energy efficiency. And I'm just
4 wondering how that number is determined? That -- I think
5 you said earlier it was 168 megawatts. Is that -- is
6 that based on a forecast from a calculation or --

7 MR. ROURKE: Let me try and -- you know,
8 I'd be very happy to try to -- to try and fill in the
9 blanks here. We actually worked with -- with all six
10 states from the region and the utilities in each of our
11 states that administer the energy efficiency plans for
12 each state. So down here we worked a lot with CL&P and
13 UI, as well as state folks. And we started that work
14 back in 2009 to try to get a better handle on what
15 commitments each of the six states was making to make
16 investments in energy efficiency going forward. A lot of
17 homework during those three years to understand the
18 plans, to understand how they're being implemented by the
19 utilities, what they were, you know, from lighting to
20 HVAC improvements to the insulation of buildings to new
21 windows to -- you know, a sort of broad spectrum. We
22 also worked with other ISOs, and in particular the New
23 York ISO that at the time was a bit ahead of us in this
24 thinking for their state. So by gathering all of that

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1 data, we were able really state-by-state to gain an
2 understanding of all the programs that had been put into
3 place up until now and the projection of those going
4 forward, what types they were, how much energy would be
5 saved by them, and also the conversion rate from kilowatt
6 hours to kilowatts or from megawatt hours to megawatts to
7 see what their effect would be on peak load.

8 So with all of that, we were able to
9 develop what I'll call a production costing model to
10 forecast what this was going to look like going forward.
11 In round numbers, as you look out through time, the six
12 states in the region will be investing approximately 800
13 million dollars a year, all six states, for these new EE
14 plans going forward. It kind of varies by state. But
15 based on that and based on -- for each of the states
16 based on the amount of money that was going to be spent
17 in each state and where they were in terms of the
18 programs that were being put in place and the cost of
19 those, we were able to forecast through time what we
20 would get first for energy savings in each state and then
21 the conversion of those into -- you know, as I said, from
22 kilowatt hours to kilowatt savings.

23 So for the region as a whole, we actually
24 get that information through the markets out about four

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1 years ahead, but we do these planning studies out to year
2 10. So we use the forecast of the EE going forward to
3 estimate what we believe would be the impact on the loads
4 getting lower, really year 6 through 10; so the first
5 four years from the markets, the last six years through
6 the forecast. And based on that assessment for the whole
7 region, it actually lowered our peak load forecast out in
8 year 10 by a little over fourteen hundred total
9 megawatts, you know, which is a fairly big number, and we
10 broke that down state-by-state. So, I -- you know, I
11 forget the exact number for Connecticut. I have it, but
12 if it was -- 168 megawatts I think you said --

13 MS. WALSH: I think that's what was said
14 earlier --

15 MR. ROURKE: -- then -- if -- if that was
16 the value --

17 MR. OBERLIN: I'm looking at the total
18 right now, and I believe it's around 140.

19 MR. ROURKE: Okay. So -- so that would
20 have been factored into the Connecticut load. But for
21 the whole region because we do look at, you know, what's
22 happening in Rhode Island, Massachusetts, Maine, New
23 Hampshire and Vermont, in all six states the load was
24 lower out of the fourteen hundred megawatts about -- from

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1 that forecast.

2 MR. OBERLIN: Can I clarify why I gave you
3 two numbers?

4 MS. WALSH: Sure.

5 MR. OBERLIN: The hundred and sixty-eight
6 accounts for the reduction in losses that would come with
7 it. You know, there's a raw value not associated with
8 the losses.

9 MS. WALSH: Okay, thank you. So is -- are
10 these typically programs that are targeted to businesses
11 or is it -- is it residential customers typically that
12 sign up for these programs?

13 MR. ROURKE: You know, it -- it varies
14 from all six states. I think what -- what we've seen so
15 far -- I think the -- you know, more of the benefit came
16 from industrial and commercial users than residential,
17 but a lot in there for residential lighting especially.
18 Lighting was probably the biggest part of this. And
19 that's going to change through time. Each of the states
20 has had some great success going from -- from
21 incandescent lighting as base line to CFLs. You know,
22 the next wave, which will be more expensive, and you get
23 a little less from it, we'll be going from CFL to LED.
24 So that's actually sort of factored into the forecast.

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1 But it's really from all sectors. There's actually -- I
2 know some states have a -- have a focus on low-income
3 families, get a -- get a certain amount. You know, they
4 tend to use less, so it sort of lessened the forecast.
5 But all that is -- is blended into the forecast.

6 MS. WALSH: Okay. I believe since the
7 last hearing we held I think about a month ago, the ISO
8 had a comment period for the updated needs assessment and
9 the solutions assessment. And I believe that is over at
10 this time?

11 MR. OBERLIN: That's correct.

12 MS. WALSH: And do you have any
13 estimations of when the final reports would be available?

14 MR. OBERLIN: Our current estimate is
15 about three weeks from Monday --

16 MS. WALSH: Okay --

17 MR. OBERLIN: -- yesterday.

18 MS. WALSH: Thank you. And as part of the
19 needs assessment does ISO typically determine a year of
20 need for transmission projects?

21 MR. OBERLIN: Typically, we do. We did
22 not in this case because it was kind of -- we considered
23 it almost a tune up of the 2011 early 2012 study. That's
24 why we didn't run back through the whole thing.

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1 MS. WALSH: Okay. So there was a year of
2 need included in the original studies that were -- and
3 that was what -- what year could you remind me?

4 MR. OBERLIN: Well it depends on what
5 aspect you're looking at. I'm doing this from memory
6 rather than to take the time to look up each item, but
7 the -- the issues in Rhode Island are immediate, they
8 need to be addressed. Issues moving power from west to
9 east across New England, you're roughly in the 2016 time
10 frame. And east to west, I think that report said 2017.

11 MS. WALSH: Okay. Thank you very much.
12 Thank you, Mr. Chairman.

13 CHAIRMAN STEIN: Thank you. We'll now go
14 to questions from the Council. Professor Tait.

15 MR. COLIN C. TAIT: No questions.

16 CHAIRMAN STEIN: Senator Murphy.

17 MR. MURPHY: No questions, Mr. Chairman.

18 CHAIRMAN STEIN: Mr. Ashton.

19 MR. ASHTON: Let's start. In the question
20 and answer to Civie No. 2, the first paragraph says the
21 information policy prohibits the release of market
22 sensitive information that is not public available. When
23 was that policy effective? Approximately if you don't
24 know exactly.

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1 MR. ROURKE: I -- I believe that went into
2 place at the start of the wholesale power markets post --
3 the late 1990's I think --

4 MR. ASHTON: Okay. And would that
5 preclude releasing data before 1990?

6 MR. ROURKE: I don't know. I'd have to
7 check on that one.

8 MR. ASHTON: I understand the NRC and so
9 forth are not interested -- NERC and so forth don't like
10 to have -- FERC doesn't like to have it public
11 information, which I think is crazy, but that's another
12 story -- why would there not -- information that was
13 released in the press regarding the status of the
14 Millstone units prior to this policy be -- not be
15 available?

16 MR. ROURKE: I believe anything that's out
17 in the media is -- is available. I think that's fair
18 game --

19 MR. ASHTON: My recollection is that every
20 time Millstone hiccups, it was in the press.

21 MR. ROURKE: That -- that may be true,
22 yeah.

23 MR. ASHTON: Okay. So -- I want to get
24 into a little bit the long-term emergency ratings. First

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1 of all, what does long-term mean?

2 MR. OBERLIN: It's a rating which is
3 applicable for what we refer to as one load cycle in the
4 summer that is 12 hours, in the winter it's I believe 4.
5 It has to do with the load shape. It assumes that it's
6 an emergency rating you can lean on, potentially eating a
7 little bit of life out of the equipment, and you're
8 allowing for the operators to use that rating --

9 MR. ASHTON: Well let's make it easy, just
10 tell me what the times are. First of all, what does
11 long-term and short-term mean?

12 MR. OBERLIN: For the long-term -- let me
13 stick with summer since that's more germane to what we're
14 talking about here, would be 12 hours. And the short --
15 the short-time emergency rating would be 15 minutes.

16 MR. ASHTON: Okay.

17 COURT REPORTER: One moment please.

18 (pause - tape change)

19 MR. ASHTON: So long-term would be 12
20 hours in the summer?

21 MR. OBERLIN: Correct. Yes.

22 MR. ASHTON: How about winter?

23 MR. OBERLIN: Four hours.

24 MR. ASHTON: Four hours, okay. And you

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1 said in your response that you're allowing for a little
2 bit of life to be taken out of the equipment. What is
3 that? Is that due to the effects of annealing?

4 MR. OBERLIN: It's one of the potentials.
5 It depends upon the piece of equipment, but for an
6 overhead conductor that's correct.

7 MR. ASHTON: So it's annealing on the
8 overhead conductor. And would the long-term emergency
9 rating change as the line ages? Some of these
10 transmission lines go back 40 plus years. Does that mean
11 you can still apply a long-term rating to it or have they
12 -- has it used all its long-term life?

13 MR. OBERLIN: We continue to use the same
14 ratings until the transmission owner provides us a new
15 rating. Exactly how the rating would be affected over
16 time, you may have to actually ask CL&P.

17 MR. ASHTON: May have what?

18 MR. OBERLIN: May -- you may have to ask
19 CL&P. I -- we do not change the ratings on our own --

20 MR. ASHTON: Does ISO control how you rate
21 a line?

22 MR. OBERLIN: We -- we have a standard
23 procedure for line rating --

24 MR. ASHTON: Is that a yes or no?

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1 MR. OBERLIN: We do not control it, no.

2 MR. ASHTON: Do you establish how the
3 rating should be applied?

4 MR. OBERLIN: Yes, we do.

5 MR. ASHTON: And does that reflect things
6 like wind velocity and ambient temperature?

7 MR. OBERLIN: Yes, it does.

8 MR. ASHTON: And what are the ambient
9 temperature and wind ratings that you apply for LTE?

10 MR. OBERLIN: The wind I believe is three
11 feet per second. Ambient -- I don't remember what the
12 ambient is. I want to say it's a hundred degrees
13 Fahrenheit.

14 MR. ASHTON: A hundred degrees Fahrenheit.
15 Do you know or do you -- you're shrugging your shoulders.

16 MR. OBERLIN: I -- I -- I don't -- I can't
17 say that I know.

18 MR. ASHTON: Let's assume arguendo that a
19 hundred degrees is the figure. How many times does that
20 temperature hit a hundred degrees in Connecticut? Do you
21 have any idea?

22 MR. OBERLIN: I don't have a count, no.

23 MR. ASHTON: Is that -- go with a -- with
24 a peak load forecast that's a 50/50 forecast or a 90/10

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1 forecast?

2 MR. OBERLIN: It would be more in line
3 with the 90/10 forecast.

4 MR. ASHTON: Okay.

5 MR. ROURKE: I -- I know last summer --
6 last summer and not this year, but the summer of 2011 at
7 the time of our peak during the summer, as I recall, it
8 was roughly 103 degrees at Bradley Field. That's --
9 that's -- that's what I recall from last year, but --

10 MR. ASHTON: Is that an all time peak or
11 is this a common occurrence, or what?

12 MR. ROURKE: Not common, but, you know, we
13 certainly touch in the high 90's to 100 pretty -- pretty
14 commonly for the region.

15 MR. ASHTON: How many times has it hit a
16 hundred this year, do you know?

17 MR. ROURKE: I don't think we got there
18 this year --

19 MR. ASHTON: I don't think so --

20 MR. ROURKE: -- that -- that I recall.

21 MR. ASHTON: Does -- wind direction of
22 three feet per second, if my memory is correct, that's
23 about two miles an hour. And what direction is that
24 wind, transverse, longitudinal, oblique? Does it make a

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1 difference?

2 MR. OBERLIN: I don't know. I could make
3 a lot of educated guesses, but I can't say that I know.

4 MR. ASHTON: Does that include convection,
5 a vertical component due to heating?

6 MR. OBERLIN: I don't know.

7 MR. ASHTON: How about a little homework
8 assignment.

9 MR. ROURKE: You know, we -- we actually
10 have this all written down in our -- in our ratings
11 procedure. I'm sorry we didn't bring it along --

12 MR. ASHTON: Are those parameters set by
13 ISO or are they set by the individual utilities?

14 MR. OBERLIN: They're in the ISO's
15 procedure. The procedure does allow the transmission
16 owner to justify a different methodology and assumptions,
17 but that was probably four or five years ago. These
18 assumptions were revisited and some -- standardized
19 across New England. So each of the TOs are now using the
20 same set of assumptions.

21 MR. ASHTON: Okay. And what temperature -
22 - conductor temperature would that allow if you have a
23 hundred degree ambient -- this is all Fahrenheit I assume
24 -- three feet per second transverse wind velocity and an

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1 unknown component of convection, what conductor
2 temperature would that allow?

3 MR. OBERLIN: I don't know, but I believe
4 it's 140 degrees C.

5 MR. ASHTON: A hundred and forty C, okay.
6 And that's -- so that's really the controlling
7 temperature?

8 MR. OBERLIN: Yes.

9 MR. ASHTON: So --

10 MR. OBERLIN: That's what matters.

11 MR. ASHTON: -- we can talk about
12 everything else, but it's got to come down to 140 C for
13 aluminum, I assume that is --

14 MR. OBERLIN: Yes --

15 MR. ASHTON: -- as a conductor
16 temperature?

17 MR. OBERLIN: Yes.

18 MR. ASHTON: And that's for -- that's what
19 controls the effect of annealing?

20 MR. OBERLIN: Correct --

21 MR. ASHTON: Okay --

22 MR. OBERLIN: -- well it's -- it's the
23 aluminum and the steel center support.

24 MR. ASHTON: Does ISO have control or set

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1 standards for maintenance practices on a transmission
2 line? I understand that they say yes you can take a line
3 out of service or no you can't, but how about such things
4 as requiring certain maintenance, do you do that?

5 MR. ROURKE: We don't have any maintenance
6 standards past what -- what you'd find in NERC -- excuse
7 me -- in the NERC standards.

8 MR. ASHTON: Does NERC have standards as
9 to how many times you do maintenance, what the conditions
10 are and so forth?

11 MR. OBERLIN: I don't know. I know
12 there's requirements for vegetation management and stuff
13 to keep the growth out of the lines. NPCC has its own
14 set of maintenance requirements for a certain subset of
15 equipment on our system, but I can't say that I know
16 them.

17 MR. ASHTON: Well is it fair to say that
18 one concern of a system operator or an operations in a
19 utility would be the conditional splices in a line?

20 MR. OBERLIN: Yes, it is.

21 MR. ASHTON: And does ISO have anything to
22 say about how many times, how frequently you go out and
23 check splices by thermograph or what have you?

24 MR. ROURKE: We don't, no.

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1 MR. ASHTON: So that's entirely up to the
2 individual operating utility?

3 MR. ROURKE: That's correct --

4 MR. OBERLIN: That's correct --

5 MR. ROURKE: -- yes.

6 MR. ASHTON: That's a surprise. So no
7 standardization whatsoever in that area? Is that fair to
8 say?

9 MR. ROURKE: I -- well I would say that
10 those -- those practices probably vary across the seven
11 transmission owners here in the region, yeah.

12 MR. ASHTON: Do splices fail?

13 MR. OBERLIN: They can.

14 MR. ROURKE: They can.

15 MR. ASHTON: Have they?

16 MR. ROURKE: Yes.

17 MR. OBERLIN: Yes.

18 MR. ASHTON: Could I be so bold as to
19 suggest that that's a good homework assignment for ISO to
20 take a look at.

21 DR. BARBARA C. BELL: Mr. Chairman.

22 CHAIRMAN STEIN: Dr. Bell.

23 DR. BELL: Just to -- just to follow up to
24 Mr. Ashton's question, a minute ago you mentioned -- in

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1 the course of talking about NERC, you mentioned NPCC.
2 You said that they did have maintenance standards. So my
3 question would be what are the maintenance standards? I
4 know that NERC has vegetation management standards.
5 Okay, we -- we've got that out of the way. But what
6 about NPCC, are their maintenance standards also
7 vegetation mainly or do they have anything to do with the
8 condition of the conductors themselves, which is what Mr.
9 Ashton is interested in?

10 MR. OBERLIN: Yeah. And I'm not aware of
11 any NPCC maintenance standards on the condition of the
12 conductor itself. I'm not going to say they don't exist.
13 What I'm familiar with of the NPCC testing is often
14 related to the substation equipment itself, relay
15 calibration, testing, and things like that.

16 MR. ASHTON: Any more? Okay. Let's turn
17 a little bit to load forecast --

18 MR. MACLEOD: Mr. Ashton, may I ask -- I
19 think you suggested a homework assignment with respect to
20 --

21 MR. ASHTON: Outside of this docket.

22 MR. MACLEOD: Okay, very good. Thank you.

23 MR. ASHTON: I want to talk a little bit
24 about load forecasting. And I'm wondering if the summer

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1 peak that's been established so far was at, below, or
2 above the forecast peak?

3 MR. ROURKE: Our highest peak we've set so
4 far was back in -- during the summer was back in August
5 of 2006 --

6 MR. ASHTON: The 2012 peak did or did not
7 match forecast? That's my question.

8 MR. ROURKE: Oh. Well, we're -- you know,
9 we're -- we're going to be doing that assessment this
10 summer, but a quick look at it is we were -- we were very
11 close. My - my group does more of the long-term forecast
12 out for 10 years, but we forecast the peak for each
13 season out for four to ten years. The weather lined up
14 this summer very closely with the 50/50 forecast and
15 load. Once we adjusted for all the energy efficiency in
16 markets and demand response, it looks like it lined up
17 very closely with the 50/50 forecast for this year. We
18 tend to -- we check this each year, both the summer peak
19 forecast and the winter, but we tend to run with roughly
20 a less than one percent error on our seasonal long-term
21 forecast.

22 MR. ASHTON: Do you have a pool up in ISO
23 on betting -- (laughter) --

24 MR. ROURKE: I -- I do have a diet coke on

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1 my desk that I won from my boss about three years ago, so
2 yes I -- (laughter) -- so occasionally there is --

3 A VOICE: That's not much of a --
4 (laughter) --

5 MR. ASHTON: Aside from the peak load has
6 there been any breakdown in the components to peak load
7 and also megawatt hours as to industrial, commercial, and
8 residential, and how they're shaping up versus
9 projections?

10 MR. ROURKE: I think the -- if you look at
11 peak by -- by customer classes is really done more by the
12 utilities than at the ISO. We really look at more high
13 level econometric view of the system, what's going on
14 with forecasts for economic growth, population,
15 disposable income, gross domestic product for each state.
16 You know, those are kind of the key factors that go into
17 ours. We do work with the load forecasters from each of
18 the utilities. We sort of do ours from the top down.
19 They do theirs from the bottom up by -- by customer class
20 --

21 MR. ASHTON: But don't those factors all
22 have a different bearing on the different customer
23 classes?

24 MR. ROURKE: They all can. I mean it is

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1 not --

2 MR. ASHTON: I know they can, but don't
3 they in fact?

4 MR. ROURKE: They -- they do, but I think
5 what -- you know, what we found is those are captured in
6 our models quite -- quite accurately.

7 MR. ASHTON: Supposing that the individual
8 companies in compiling their forecast, disaggregating it
9 into classes, come up with, for the sake of discussion, a
10 collapse, if you will, of industrial load and sustaining
11 of the -- pardon me -- collapse of the industrial load
12 and more or less status quo of commercial load, how would
13 that be picked up in your top down forecast?

14 MR. ROURKE: Well, we -- the -- the
15 forecast of economic activity for the region should --
16 should tend to pick those up. We've got those statistics
17 by state, so -- so if there was a significant shift in
18 any one state, we would pick those up. To the extent
19 that we don't, that's why we collaborate with the
20 utilities, with them sort of doing their bottoms up
21 approach to the load forecasting and ours more top down.
22 Where we see a gap, we work with them to understand it,
23 what -- what drives the gap. And if needed, we'll adjust
24 our forecast based on input from the utilities --

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1 MR. ASHTON: Let me cut to the chase. You
2 have 51 percent of the control on the forecast. Is that
3 fair to say?

4 MR. ROURKE: No, we are -- we are the
5 planning authority for the region sure. So if --

6 MR. ASHTON: Is that a yes?

7 MR. ROURKE: No, we don't think about it
8 in terms of fractions, but once the forecast is out
9 there, it's our forecast and we stand by it yes.

10 MR. ASHTON: I'd like to pursue this at
11 the forecast hearing --

12 MR. ROURKE: Okay --

13 MR. ASHTON: -- I don't want to belabor it
14 here. But I am concerned that the economic conditions
15 we've been experiencing are really unprecedented in my
16 lifetime almost, not quite, but certainly they are
17 unprecedented since World War II, and that puts a strain
18 on forecasts. It may make forecasting a little bit more
19 dicey than it was in the past.

20 Mr. Oberlin, you mentioned the loss of a
21 thousand megawatt pump storage system -- or plant I guess
22 it is that occurred. Is that a fact?

23 MR. OBERLIN: That's correct.

24 MR. ASHTON: What plant was it, when did

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1 it occur --

2 MR. OBERLIN: It's --

3 MR. ASHTON: -- and the cause --

4 MR. OBERLIN: It was the Northfield
5 facility and it occurred --

6 MR. ROURKE: May of 2010. It was out
7 until November 2010.

8 MR. ASHTON: That -- how did that occur
9 because there are three transmission lines as I recall
10 that terminate at Northfield?

11 MR. ROURKE: It was really an issue in the
12 station itself. It was not -- not related to the
13 transmission system getting into or out of Northfield.
14 They -- they had an issue in the -- the relationship --
15 well with silt intrusion from the upper reservoir into
16 the generators.

17 MR. ASHTON: Okay. Mr. Civie explored a
18 little bit the problems associated with overloads on the
19 Mystic 115-kV line to Rhode Island. Did ISO in looking
20 at the study for tie lines or future tie lines, consider
21 possibly opening that -- either opening that line all
22 together or looping it so that you could open it in some
23 fashion and thereby avoiding overloads?

24 MR. OBERLIN: We had looked into that.

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1 But because there are other system concerns on other
2 lines, it wasn't -- we didn't fully -- it didn't make its
3 way into our solutions.

4 MR. ASHTON: So is your answer that that's
5 just one of the problems that you're proposing to
6 overcome with this NEEWS line?

7 MR. OBERLIN: That is correct.

8 MR. ASHTON: Did ISO look at possibly
9 considering a separate route so that you couldn't get an
10 outage of two circuits on a common right-of-way for a
11 contingency, such as a tornado, which has occurred,
12 certainly in Connecticut and in New England, in recent
13 times by the way? Did you -- did you consider a
14 different routing of this line, Montville to Kingston, or
15 somewhere over that way?

16 MR. OBERLIN: We did. There is routing
17 along the shoreline, for lack of a better term, from
18 Montville over into -- toward Kent County in Rhode Island
19 --

20 MR. ASHTON: Thank you. Kent County is
21 the one I couldn't think of.

22 MR. OBERLIN: And there were also various
23 northern alternatives looked at where you started at
24 Millbury, came across toward Carpenter Hill, and either

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1 came to Manchester, going over toward Ludlow, and came
2 down into Connecticut that way.

3 MR. ASHTON: And without flogging it to
4 death, what were the disadvantages of that or the
5 advantages of double circuiting from Card to Sherman
6 Road?

7 MR. OBERLIN: Significant was costs,
8 electrical performance. The proposed solutions had the
9 best electrical performance, either the lowest or one of
10 the lowest costs. And also the utilities provide us
11 information on environmental impacts, and that was one of
12 the lower --

13 MR. ASHTON: Does that leave the Kent
14 County Substation -- is that the name of it, Kent --

15 MR. OBERLIN: Kent County.

16 MR. ASHTON: Kent County. Does that leave
17 the Kent County Substation hanging in the wind still, so
18 it's a problem to be solved --

19 MR. OBERLIN: No --

20 MR. ASHTON: -- what's the backup for
21 that?

22 MR. OBERLIN: There's a -- a second line
23 has been constructed into Kent County.

24 MR. ASHTON: Okay. I do agree that

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1 political boundaries don't make sense when you're
2 planning an electrical system. Let me just see what I've
3 got here for a second.

4 (pause)

5 MR. ASHTON: I think that's it, Mr.
6 Chairman. Thank you very much.

7 CHAIRMAN STEIN: Doctor -- Dr. Bell.

8 DR. BELL: Thank you, Mr. Chair. Mr.
9 Oberlin, in the study that was provided to us on the
10 impact of the NEEWS projects on the Lake Road location -
11 -

12 MR. ROURKE: I've got it here, Brent --

13 MR. OBERLIN: Give me one second so I can
14 grab it.

15 (pause)

16 MR. OBERLIN: Okay, I'm all set.

17 DR. BELL: Okay. On page 6 -- I'm looking
18 at page 6 and I have one minor question, which is the
19 term Delta P, what does the P stand for?

20 MR. OBERLIN: It's change in electric
21 power out of the machine. In this case --

22 DR. BELL: So it stands for power? I mean
23 I know what --

24 MR. OBERLIN: Correct --

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1 DR. BELL: -- I know it's a change -- okay

2 --

3 MR. OBERLIN: Correct --

4 DR. BELL: -- so P is for power --

5 MR. OBERLIN: Correct --

6 DR. BELL: -- that's -- okay, great. Now
7 just at the -- at the bullet -- at the very bottom of the
8 page it says need to follow up with the generator owner
9 as to the potential elimination of this SPS. I know what
10 SPS is. My question is what specifically is meant by
11 following up with the generator owner as to the potential
12 elimination? I mean you have outlined what the potential
13 elimination will be in terms of transmission planning.
14 The generator presumably knows mechanically what's -- or
15 electrically what's involved. I don't quite -- I mean --
16 you know, is it like just saying to the generator, hey,
17 you know, we're going to remove the SPS? I mean
18 presumably the owner would know that. So, I don't quite
19 understand what specifically you're going to follow up
20 on.

21 MR. OBERLIN: Okay. Maybe a little
22 background. The -- the SPS is there to protect the
23 machine itself when there's a large Delta P on the
24 machine. It essentially puts a torque on the shaft of

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1 the machine. It's kind of like bending a paper clip, the
2 more and more times you do it, eventually it can break
3 the shaft.

4 The SPS was originally -- well it was
5 installed to protect the machine. ISO New England -- the
6 transmission owners have no need for this SPS. It is
7 simply to protect their asset. With all the projects
8 that are contemplated here through and including the
9 Interstate Reliability Project, what happens is you build
10 a second path right through that area. We've shown the
11 owners that with all elements in service for a first
12 contingency, the potential change in power -- or
13 instantaneous change in power output out of the machine
14 to be quite small. The remaining question that the owner
15 has been asking us about is, okay, well what if you have
16 one of these elements out for maintenance and you have
17 high flow through the area, what is the potential
18 exposure to my machine. We've been answering their
19 questions on the side. But simply because it's an SPS
20 that's protecting their asset, I can't make -- I can't
21 say we have to -- I can't require it be ripped out --
22 sorry -- removed.

23 MR. ASHTON: Disabled.

24 MR. OBERLIN: But it is something we are

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1 working with them because they do have an exposure right
2 now to -- if the SPS inadvertently operates, they also
3 take a full load trip of the station, which is pretty
4 aggressive for a machine. So we need to work with them
5 to find out, you know, can we actually take this thing
6 out and get rid of it. But because it's protecting the
7 errors, we don't really have the right to tell them it's
8 coming out.

9 DR. BELL: I see. And it's also a cost
10 issue obviously --

11 MR. OBERLIN: Taking it out I can't expect
12 would be a substantial cost.

13 CHAIRMAN STEIN: Mr. Ashton has a follow-
14 up.

15 MR. ASHTON: Just so I'm clear, when you
16 speak of change in torque on the shaft, is that because
17 under normal conditions a generator is putting its
18 electrical output into the system, and should the
19 electrical connection be severed, the energy -- the
20 thermal energy would tend to accelerate the generator
21 since there's no load on it to keep it slowed down, so
22 it's that change that would affect the torque on a
23 shaft?

24 MR. OBERLIN: This is actually a slightly

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1 different phenomenon. What happens is because of where
2 this unit sits -- without the Interstate Project on
3 today's network, it sits on a major tie line between
4 Connecticut and Rhode Island. When you open up one side
5 or the other, the unit becomes electrically part of
6 whatever side it's still connected to at that point and
7 has an angle associated with it --

8 MR. ASHTON: Yeah --

9 MR. OBERLIN: -- to either Card or
10 Sherman. When automatic reclosing occurs, those angles
11 immediately snap back --

12 MR. ASHTON: Yeah --

13 MR. OBERLIN: -- to almost the same. And
14 that change in angle causes the machine to
15 instantaneously change its output.

16 DR. BELL: Mr. Chairman, I -- I just have
17 a procedure question. It's 1:00 o'clock. I don't know
18 what you have in mind about a lunch break, but I have
19 several more questions.

20 CHAIRMAN STEIN: So I guess it's a good
21 time to -- I guess --

22 MR. ASHTON: Lunch is served --

23 CHAIRMAN STEIN: -- given what you've just
24 said, I guess we're going to take a -- (laughter) -- a

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1 45-minute lunch break. So we'll be back here at 1:45.

2 (Whereupon, a luncheon break was taken at
3 approximately 1:00 p.m.)

4 CHAIRMAN STEIN: Okay, we will reconvene
5 our meeting. And we'll go back to Dr. Bell for
6 questions.

7 DR. BELL: Thank you, Mr. Chair. I want
8 to start a different sort of type of question. When you
9 were doing the studies on the -- on needs, the various
10 studies, to what extent did you include renewable
11 resources, say wind in Rhode Island as generators?

12 MR. OBERLIN: We included resources which
13 have an obligation through the forward capacity market.
14 I do not believe that there's any large scale wind in
15 Rhode Island. There might be some small individual
16 plants that are in there, but I'm not aware of any large
17 scale wind that's sitting in that market.

18 DR. BELL: Okay. You've done a number of
19 studies over the years since -- going back to probably
20 2007 on renewable energy, along with other resources,
21 resource expansion, studies of wind in Maine, and you did
22 the Governor's study of large scale integration of
23 renewable resources. You're familiar with all of those -
24 -

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1 MR. OBERLIN: Yes.

2 DR. BELL: Do you think that the project
3 we're now considering has any justification in terms of
4 connection or integration of renewable resources in --
5 sort of in the large scale picture?

6 MR. ROURKE: Well I would think -- sure,
7 let me start, Brent -- I would think if -- if the states
8 did want to move forward with access to large scale wind,
9 the bulk of the land based wind are -- the best sites for
10 land based wind tend to be in the far northern or western
11 part of Maine, northern New Hampshire, some in northern
12 Vermont. So we -- we certainly would need to build some
13 transmission to reach up there to get it and bring it
14 down south. With this project in place, it would allow
15 that power to more freely move from eastern New England
16 to the west and from north to south. It would actually
17 help both of those things.

18 The -- the offshore wind, the best
19 offshore wind sites tend to be more off of Cape Cod and
20 Rhode Island more so than actually off the coast of
21 Maine. So again, those would tend to make landfall sort
22 of -- well from here, sort of south and east from here.
23 And this project again would help to move -- to move
24 power sort of from the southeast part of the system

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1 west.

2 DR. BELL: So in the -- in the
3 application, which I know you didn't write, but it says
4 that the project will have a benefit because it will
5 enable access to renewable resources. So from the ISO
6 perspective, those resources would be as you just
7 specified, either offshore from Rhode Island or
8 Massachusetts, and then onshore shore wind from New
9 Hampshire or northern Vermont, or something like that?

10 MR. ROURKE: Well I think with the -- with
11 the studies we've done, those are the best sites in terms
12 of the best wind sites. You really get the -- you get
13 the best performance from the wind farms themselves. So,
14 I think --

15 DR. BELL: Any other renewable resources
16 that you are thinking of?

17 MR. ROURKE: I think -- you know, wind is
18 -- wind is I believe the single largest source here for
19 the region.

20 We're certainly starting to see more solar
21 power come forward, though slower and in smaller values.
22 I think right now there's approximately a hundred total
23 megawatts of solar installed in the region or about that
24 much. We're -- we're actually doing some work now to try

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1 to understand what -- what that's going to look like in
2 the next eight to ten years and we're -- you know, we're
3 still in the early stages of that. But you know, you
4 could see another five or six hundred of solar during the
5 next eight to ten years. And that could be anywhere
6 really. You know, we don't know exactly where that would
7 show up.

8 But it's -- but I think past the wind
9 there's certainly -- well if -- if -- if you follow
10 things that Northeast Utilities is doing, they're
11 certainly under study right now to build a new tie line
12 to Quebec to bring hydro power in from Quebec. As it's
13 currently being studied, it would drop that power off in
14 eastern New Hampshire. And so for it to get down here,
15 you know, it would -- sort of on the same path as that
16 wind out of Maine.

17 So, I would think, you know, the hydro,
18 that would be a fairly large source if -- if that were to
19 come forward. It's too early to tell on that one yet.
20 The solar looks like it's -- you know, there will be some
21 there, but there will be less -- most likely less than
22 the wind. So the best wind sites really are onshore,
23 sort of the three northern New England states, and Maine
24 being the dominant source just because of the land

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1 available, and the offshore really off of Cape Cod and
2 Rhode Island.

3 DR. BELL: Can you give us any sense of
4 the proportions of renewables in the -- of renewables to
5 traditional energy sources in the cue right now for
6 instance?

7 MR. ROURKE: Well in the cue, so maybe
8 just by nameplate value, and these will be rough numbers,
9 I'm not --

10 DR. BELL: Yeah, I'm just looking for a
11 ballpark --

12 MR. ROURKE: -- I don't have the exact --
13 there's about 6,000 total megawatts of new generators in
14 our cue right now going through study for
15 interconnection. About 40 percent of that, roughly
16 twenty-four or twenty-five hundred megawatts of the 6,000
17 is wind. Maybe the biggest of those wind farms is Cape
18 Wind, which, you know, is 430 roughly total. And the
19 rest are smaller. And I would say most of those are
20 again in Maine. But -- but of that 6,000 about twenty-
21 four or twenty-five hundred of it is wind. There's a
22 little bit of solar, a little bit of biomass, some small
23 hydro, but those tend to be more folks doing uprates to
24 existing hydro stations that are out there, so it may be

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1 going from, you know, 10 megawatts to 10 and a half
2 megawatts or 30 megawatts to 32 megawatts, sort of a
3 thing like that.

4 Most of what's in the cue right now --
5 most of the rest of it, you know, are really new natural
6 gas fired plants. That's roughly the rest of the 60
7 percent that's in the cue. There might be some small
8 uprates to existing coal or nuclear units. And there's a
9 little bit of an uprate to one of the pump storage plants
10 in the region. But in general, if you break the cue
11 down, 60 percent roughly is natural gas, 40 percent
12 roughly is wind. That's -- I mean there's some other
13 small stuff in there, but that's pretty much it.

14 DR. BELL: Okay, thank you. Now
15 continuing sort of on this line of questioning but
16 switching again, you're familiar with the FERC Order
17 1000, which --

18 MR. ROURKE: Yes, ma'am --

19 DR. BELL: -- allows into play public
20 policy directives -- okay. And those -- and the public
21 policy aims are often renewable resources --

22 MR. ROURKE: Right --

23 DR. BELL: -- for how to integrate those
24 with the transmission system. Do you have any plans in

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1 changing your cost allocation structure for transmission
2 projects, like say this one according to FERC Order 1000,
3 which expressly says that you can change cost allocation
4 -- the cost allocation formula?

5 MR. ROURKE: Actually, we're in the final
6 stages of drafting the first set of changes to our
7 transmission tariff to comply with Order 1000. So for --
8 for projects like this that are needed for reliability
9 needs for the region there are no changes going into our
10 tariff on changes to cost allocation.

11 Cost allocation for projects, we do
12 planning for public policy for the region. We've worked
13 a lot with the six states on that. So we've left it a
14 little -- well we've left some flexibility in the
15 language so if not all six states are in favor of going
16 forward with something. But let's say four out of six
17 states were and they wanted to sponsor that transmission
18 line up through Maine to go get some wind power to get it
19 down south, the tariff language right at the moment as
20 written, and we believe this is where it's going to end
21 up, that those four states would agree on how to allocate
22 costs amongst themselves. So they could choose to do it
23 like we do now with, you know, a load weighted pro rata
24 share. They might agree that the state that bears the

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1 burden of the siting of all the lines through it maybe
2 gets to pay a little less and the other states would pay
3 more, but that's really been left up to them. So in the
4 public policy space, the cost allocation could be
5 different than sort of the whole six states load -- you
6 know, load weighted share, which we have now. But for --
7 for these kind of project there's -- there's no changes
8 to cost allocation.

9 DR. BELL: So you're -- you're -- even
10 through you're arguing that there is a benefit to
11 Connecticut for a project like the one we're discussing
12 right this minute, and the other -- and the other NEEWS
13 projects, you say there's a benefit to accessing
14 renewable resources, you would -- and that -- and that
15 benefit is a public -- is connected with public policy or
16 justified by public policy -- you are saying that that
17 would -- that benefit doesn't -- is what -- corollary to
18 the main justification for the project, which would be
19 reliability, so therefore there would be no -- FERC Order
20 1000 would have no impact on the cost allocation for this
21 project --

22 MR. ROURKE: Right --

23 DR. BELL: -- or something like that?

24 MR. ROURKE: Correct, right. We would

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1 need this whether the region chose to build out wind in
2 Maine and tried to move that power south or not. We --
3 we still have a need for this project. So this -- this
4 project or other projects like this meeting the
5 reliability needs for the region would not get swept into
6 the public policy cost allocation.

7 DR. BELL: And this would apply to all the
8 NEEWS projects?

9 MR. ROURKE: Yeah, NEEWS --

10 DR. BELL: I mean we have --

11 MR. ROURKE: You have -- you have --
12 Greater Springfield is under construction right at the
13 moment, and then you have this one. The CCRP is still
14 under study. That has been actually sort of wrapped into
15 the Greater Hartford Study, so we don't know exactly what
16 that one is going to look like yet. But if that were to
17 come forward, it would be going through the process we're
18 going through now, to look at the reliability needs for
19 the region. And I -- I don't expect that to get swept
20 into planning for public policy.

21 DR. BELL: Okay. You left out the Rhode
22 Island --

23 MR. ROURKE: Oh, Rhode Island, sorry.
24 That's under construction as well. Yeah, not to -- not

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1 to -- not to leave them out. That's a big deal for the
2 City of Providence and -- so --

3 DR. BELL: Well -- so my last question is
4 now just a question about the Rhode Island project. Now
5 obviously that doesn't affect us, it's not in our
6 jurisdiction, and we know that NU isn't handling that in
7 terms of permitting and so forth. But in -- we are -- we
8 have been this morning particularly talking a lot about
9 Rhode Island because this affects the Rhode Island side
10 of Connecticut obviously --

11 MR. ROURKE: Right --

12 DR. BELL: -- so could you give us kind of
13 a thumbnail sketch of how you see the Rhode Island
14 project -- what has been done in Rhode Island in
15 permitting as part of NEEWS in relation to what we're
16 considering, which is the IRP, the Interstate Reliability
17 Project, so -- so we can get a sense of the bigger
18 picture? I mean Mr. Civie was asking questions this
19 morning, which the response was yes, well Connecticut's
20 problems are okay under these conditions, but of course
21 say you were thinking about all of New England. So to
22 give us a better sense of all of New England, can you
23 tell us what -- just a thumbnail of what has been the
24 major improvements in the Rhode Island project so we can

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1 understand how we're fitting in with that?

2 MR. OBERLIN: Kind of at a high level
3 what's been -- or what is ongoing right now in Rhode
4 Island is -- the most significant piece is the new 345-kV
5 line that goes from Kent County up to West Farnum. Today
6 there's a single line feeding that area. The loss of
7 that line -- they'd have to rely on the 115-kV to supply
8 that area. Building the second line allows them to -- if
9 loss of the first line.

10 There's a second autotransformer added at
11 Kent County again to provide more robust supply to that
12 area. There's a new -- an autotransformer has been
13 installed between the 345-kV and the 115-kV, kind of
14 helping out on the other side. It's called Berry Street
15 Substation. And then in and around the state there's
16 been various re-conductorings, reline, rebuilds, and
17 things like that.

18 Interstate comes along and really helps to
19 pull the power off the 115-kV and keep it up on the 345-
20 kV to alleviate some of the underlying flows that are
21 going on in the system.

22 DR. BELL: Okay. And so -- so the Rhode
23 Island project as you've just described it, you're
24 basically improving that system, which has been ordered

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1 to put in 345 and certainly enable a much better -- much
2 more reliability just with the generators and new
3 transmission lines built around the system that already
4 exists in Rhode Island. You're not trying to plan for
5 integrating say the wind, which we all know is -- has
6 been proposed in Rhode Island?

7 MR. OBERLIN: Correct. The -- the
8 upgrades that are ongoing right now are just reliability
9 concerns and not installation of new generation or
10 integration of new generation.

11 DR. BELL: Thank you. Thank you, Mr.
12 Chair, those are my questions.

13 CHAIRMAN STEIN: Okay, thank you. Mr.
14 Lynch.

15 MR. LYNCH: The first question I had my
16 mentor Mr. Ashton answered, so you're off the hook.

17 The -- in following up on some of Dr.
18 Bell's questions on wind power, am I understanding
19 correctly that offshore would be more reliable -- I'm
20 speaking now about Connecticut -- than something that's
21 built on land -- I mean we're not like the Midwest or in
22 Texas you have hundreds of thousands of plants for -- you
23 know, megawatt power, you know, up in the hundreds of
24 thousands. I think T Boon owns most of it -- and -- so

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1 I'm getting the feeling that what you're saying is if
2 you're inland here in Connecticut, it's not a very
3 practical way for alternative power. Am I off here or am
4 I -- am I reading that wrong?

5 MR. ROURKE: I think -- no, I -- no, I
6 think you're right in terms of when it comes to serving
7 the peak load during the summer. So let me explain that
8 for a minute.

9 It's -- when you look at the historical
10 wind data, just when the wind blows at all these various
11 sites, for onshore wind sites -- and this is -- I think
12 this is generally true for all, if not most of our
13 onshore wind sites, it -- it tends to blow the least at
14 the time of the hottest days during the summer. So --
15 and these -- these peak days that we model tend to be
16 sort of the third or fourth day of the heat wave, it's
17 humid, the air is stagnant, every -- you know, just sort
18 of really hot and still, so there's just not a lot of
19 wind. So that's -- I mean when you look back at it,
20 that's why, you know -- you know, we don't think the
21 onshore wind really correlates well with the peak. You
22 get lots of energy from it, but it might be in the fall,
23 the spring, or at nighttime, but you tend to get less
24 energy out of the onshore wind units during the summer

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1 peak period.

2 The -- the offshore wind -- because the
3 land -- land heats up much faster than water during the
4 summer. So you do tend to get some convection flow just,
5 you know, from cold to hot air or hot to cold air. So -
6 -

7 COURT REPORTER: One moment please.

8 (pause - tape change)

9 COURT REPORTER: Thank you.

10 MR. ROURKE: Sure. So the data we've seen
11 for the wind blowing at the offshore wind sites tends to
12 correlate better to the winter peak load. You know, you
13 may not find them at full output, but you don't find them
14 at zero either. So it -- it actually does -- from a load
15 serving at the time of the summer peak, they tend to
16 correlate better.

17 MR. LYNCH: Thank you. That explains it a
18 little better for me.

19 My next question -- I happen to agree with
20 you and Mr. Ashton that, you know, state lines shouldn't
21 be involved in reliability planning, which leads into my
22 question. Last week Governor Patrick signed a deal with
23 the Mashpee Wampanoag and -- about major development in
24 southeastern Massachusetts. Would that have any impact

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1 on this project for need?

2 MR. ROURKE: Well if -- so if there was a
3 large growth in load in the eastern half of the system,
4 all of the studies we did to look at what if the outages
5 were in the east and we were trying to move power from
6 west to east, that would actually make the needs more,
7 trying to move power from west to east. If you're doing
8 a study to move power from east to west, you know -- you
9 know, it wouldn't change that much because the load is in
10 the east and not in the west. But -- but the thought for
11 the region -- you know, let's say there was great --
12 there was great load growth right in Boston as an
13 example, that would tend to pull more power to the east,
14 so it would stress the studies we did when we looked at
15 the west to east flow.

16 MR. LYNCH: So are you saying this large
17 new growth sector in southeastern Massachusetts if it
18 needed power, it would be drawn from Boston and not from
19 --

20 MR. ROURKE: Oh, no --

21 MR. LYNCH: -- Lake --

22 MR. ROURKE: No, I'm sorry. It would --
23 well in these studies if the outages of resources were in
24 the east, then it would want to draw power from the west,

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1 you know, from out here or from the Springfield area,
2 whatever, over, to serve that load. So it would actually
3 make these needs more than less.

4 MR. LYNCH: Thank you. Those -- that's my
5 question, Mr. Chairman.

6 CHAIRMAN STEIN: Okay. Mr. Wilensky.

7 MR. EDWARD S. WILENSKY: Just one
8 question. And I'm sorry if this was asked before I got
9 here this afternoon, I apologize -- or this morning -- I
10 apologize.

11 Do you think there's enough generation in
12 the State of Connecticut to take care of their needs,
13 plus the ability to import? I mean is there more
14 generation needed in the State of Connecticut as far as -
15 - to the best of your knowledge -- because we have two
16 projects that have been hanging out there for a hundred
17 years -- (laughter) -- one 13 years, the other -- well
18 both about 13 years.

19 MR. ROURKE: Well I think -- let me say it
20 this way, I think the State of Connecticut to their
21 credit has come a long way in the last five to six years.
22 I know the state went forward to contract for Kleen
23 Energy, which is on-line and operating. A lot of new gas
24 turbines that have come forward. So roughly fourteen

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1 hundred megawatts of new generation as I recall in the --
2 in the State of Connecticut, you know, over the last four
3 or five years, which has been a huge help from a
4 reliability perspective.

5 Having said that, when you look out for
6 ten years and you can model what could happen, which
7 we've done in these studies, you know -- you know, some
8 key outages of generators down here at the time of the
9 peak load during the summer get you right back into the
10 needs that we've seen here. So, I think you've come a
11 long way, which is good, but as we've seen in these
12 studies there's -- you know, there's still needs for
13 other sources, either, you know, new incumbents in the
14 State of Connecticut or the ability to move power into
15 the region. So that's what this project does.

16 MR. WILENSKY: So you're saying there is
17 enough generation that we have right now and being able
18 to import, we are fairly --

19 MR. ROURKE: You're much better off right
20 now than you were five years ago. But as you look --
21 look forward through time, and some of these needs are
22 within the next several years, you know, you will have
23 needs for something else, which is why, you know -- you
24 know, there's certainly needs for this project for the

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1 State of Connecticut and for the western half of New
2 England.

3 MR. WILENSKY: Thank you -- thank you very
4 much. Thank you, Mr. Chairman.

5 CHAIRMAN STEIN: Okay. I have a few
6 questions. First -- you have questions? Okay.

7 MR. TAIT: On renewable resources, you see
8 wind as being significant in New England. Is it 40
9 percent?

10 MR. ROURKE: Oh -- well what's in the cue
11 -- and in terms of the generators that have come forward
12 to seek to interconnect to the network, about 40 percent
13 of those are wind. Our experience with generators in the
14 cue is you see roughly one out of six of them -- roughly
15 one out of six of them actually get built, but -- but
16 what's in the cue right now --

17 MR. TAIT: And those are generally in
18 northern New England?

19 MR. ROURKE: I would say most of it is in
20 northern New England. As I said, Cape Wind is in there.
21 But most of the rest of it I'd say is in Maine, New
22 Hampshire, a little in Vermont. There might be a little
23 bit in western Massachusetts, but most -- most of it is
24 up north, yeah.

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1 MR. TAIT: Basically, Rhode Island and
2 Connecticut are not in your --

3 MR. ROURKE: I don't know of any --

4 MR. TAIT: -- radar?

5 MR. ROURKE: I don't know of any wind
6 projects in our cue from this state. There may be, but
7 they would be tiny if they're in there. I'm offhand not
8 aware of any.

9 MR. TAIT: Do you see any other renewable
10 resources, such as -- in the newspaper I saw that they
11 were thinking of doing the Passamaquoddy tidal, giving it
12 some new energy -- new emphasis to see whether -- whether
13 it will work. Do you know of any other --

14 MR. ROURKE: There's a -- yeah, there's a
15 very small pilot that's actually going on right now up in
16 East Port, Maine --

17 MR. TAIT: That's what I -- that's what I
18 thought --

19 MR. ROURKE: -- you know -- okay, to --
20 which ties into the Bangor system up there. That's
21 fairly small, but -- you know, I forget exactly the size
22 -- 300 kilowatts to 1 megawatt -- you know, it's fairly
23 small, but -- but it is under test power, so it will run
24 under testing. So we'll see where that goes. There is a

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1 bit of solar, as I said earlier, that we're seeing coming
2 forward --

3 MR. TAIT: Where is the solar and what's
4 it like?

5 MR. ROURKE: The solar, it's really spread
6 all over. We -- we've seen a lot of -- a lot of towns
7 especially are putting small solar installations on top
8 of capped landfills or at their waste water treatment
9 plants --

10 MR. TAIT: This is for their own use and
11 not for the grid though?

12 MR. ROURKE: Some of it is going into the
13 grid. Some -- some for their own use. They tend to be
14 relatively small. Some of them are 500 kilowatts, 1
15 megawatt --

16 MR. TAIT: What's the biggest one you know
17 of?

18 MR. ROURKE: The biggest one I know of, I
19 think -- right in the City of Holyoke where the ISO is, I
20 think they have the largest one in the region, which is
21 about 4 megawatts -- 3 and a half to 4 megawatts.

22 MR. TAIT: Rooftop or a field or what?

23 MR. ROURKE: I believe it's -- I believe
24 that one is a series of rooftops if I -- if I've got that

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1 right. There is one up near the Northfield Mountain Pump
2 Storage Plant, that's in a field --

3 MR. TAIT: That feeds -- that feed to the
4 grid or --

5 MR. ROURKE: Yeah -- well, I think that
6 one may tie into the thirteen eight kV system up in -- up
7 in Northfield, but --

8 MR. TAIT: So it's more than just local
9 users --

10 MR. ROURKE: Yeah -- yeah. But they're --
11 you know, again they're not that big. A lot of them are
12 three or four hundred kilowatts, 1 megawatt, but they --
13 they -- you know, we are seeing more and more of them.

14 MR. TAIT: Thank you.

15 CHAIRMAN STEIN: Okay. Are you aware that
16 the Siting Council on an annual basis prepares a forecast
17 report -- a forecast report on loads and --

18 MR. ROURKE: Oh, yeah. I -- I believe we
19 participate in that --

20 CHAIRMAN STEIN: Okay, I just wanted to
21 make sure --

22 MR. ROURKE: -- the load forecast, we
23 participate in that proceeding, yeah.

24 CHAIRMAN STEIN: Based on my understanding

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1 of the accuracy, I think our staff probably deserves both
2 a soft drink and maybe a brownie as well -- (laughter) --
3 and you know, we look at it sort of from the bottom up,
4 so I think it's -- hopefully it is something that you
5 look at as well.

6 I don't want to continue what turned out
7 to be an interesting seminar on renewable energy, but I
8 do want to ask in your long-range forecasting how do you
9 factor in technology improvements over time, because if
10 we were having this discussion of wind and solar a few
11 years ago or hybrid cars or whatever, it would be totally
12 different, so -- I mean, I just -- how do you factor
13 something like, for example, improvements in storage
14 batteries, which would really make both wind and solar
15 much more efficient economically?

16 MR. ROURKE: Well let me start with what
17 we're doing. In the -- in our basic load forecast
18 itself, we've actually built into the algorithms for our
19 load forecasts the changes that are coming up I believe
20 at the end of 2013 for federal appliance and lighting
21 standards. So that change alone actually knocked about a
22 percent and a half off of our forecast going forward. So
23 -- so in terms of sort of our -- just the load in the
24 system getting more efficient through time, that's --

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1 that's already factored in. When you combine with that
2 the energy efficiency forecast, which we spoke about
3 earlier, actually pretty dramatic changes when you look
4 in particular at the energy needs for the region. If
5 we're right with the EE forecast going forward and the
6 influence of the lighting standards changing, it looks
7 like our energy for the region is expected to stay pretty
8 flat out through time. I mean we have slight growth in
9 your peak, but the total energy use actually staying
10 fairly flat. So we've not -- you know, we've not seen
11 lots of usage yet of storage batteries and what that
12 might do to the system. You know, they charge,
13 discharge, and -- so you have to deal with both sides of
14 the battery. You know, it's --

15 CHAIRMAN STEIN: I'm not really -- I just
16 gave that as an example of --

17 MR. ROURKE: Yeah --

18 CHAIRMAN STEIN: -- but -- I appreciate
19 what you just said. And I wondered whether you look at,
20 you know, federal standards that will be coming into
21 play. Do you ever just sort of as a theoretical
22 possibility -- it's not so theoretical -- look at what
23 maybe is being done elsewhere? I'm thinking particularly
24 of some countries in western Europe that I think are --

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1 that may be way ahead of us in some of the conservation
2 and energy efficiency of how we could be if we adopted
3 even more robust strategies?

4 MR. ROURKE: I think -- no -- I mean we --
5 we've not done that yet. We did -- you know, we've only
6 gone as far as the current forecast we have for energy
7 efficiency for the region. It's pretty significant when
8 you look at the numbers, but we've not gone past that
9 yet.

10 CHAIRMAN STEIN: Okay. Any other
11 questions from the Council?

12 (pause)

13 CHAIRMAN STEIN: Okay. I'm told --
14 suggested we take a five-minute recess and then -- and
15 then we'll continue, so --

16 MR. MACLEOD: Thank you.

17 (Whereupon, a short recess was taken.)

18 MR. MACLEOD: Mr. Oberlin, do you recall
19 having a brief discussion with Mr. Civie this morning
20 about reasonably stressing the system in conducting your
21 system planning studies?

22 MR. OBERLIN: Yes, I do.

23 MR. MACLEOD: Do you know who has the
24 authority to make assumptions regarding -- well to

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1 establish dispatch assumptions in connection with system
2 planning studies?

3 MR. OBERLIN: That authority has been
4 placed upon the transmission planner, which ISO New
5 England is for the New England region.

6 MR. MACLEOD: Okay. So in other words,
7 you have that authority in New England?

8 MR. OBERLIN: That's correct.

9 MR. MACLEOD: Okay. And I think that you
10 and Mr. Civie went through an exercise -- a mathematical
11 exercise, which resulted in a number of some forty-one
12 hundred megawatts that was assumed to be unavailable in
13 your study -- in your follow-up analysis or needs
14 analysis. I think you said that number of reasonable in
15 your estimation, correct?

16 MR. OBERLIN: Correct, but I did not add
17 it up myself.

18 MR. MACLEOD: Okay. So the numbers are
19 whatever the numbers are in the study. You're not
20 vouching for them in terms of that exercise. You're
21 simply saying that that's a round number that's probably
22 fairly accurate?

23 MR. OBERLIN: That's correct.

24 MR. MACLEOD: Is that number something

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1 which you have experienced in terms of outages that have
2 occurred or unavailable resources that have occurred at
3 the same time in actual experience?

4 MR. OBERLIN: As we talked about earlier
5 this morning, there's been some fairly significant
6 events, which we always need to remain conscious of as we
7 plan out the system. We've already discussed the
8 simultaneous outage of all four nuclear units in the late
9 90's in Connecticut. We've had the unavailability of the
10 Northfield generating facility, which is a thousand
11 megawatts, which is usually typically relied on almost as
12 a quick start unit. We've had other substantial events
13 on the system. We had an explosion at Salem Harbor
14 where the entire site was shut down until investigations
15 could be completed. That was probably on the order of
16 thirteen hundred megawatts right there. And what's
17 important to keep in mind is that after these events
18 happen, that just sets a new baseline for the system
19 operator. They need to say that's my new base, I need to
20 operate and protect the line ratings, etcetera, from
21 there. It isn't they get to say well there was my
22 contingency, I get to go home. They have to keep going
23 with what they have.

24 MR. MACLEOD: Going back to a further item

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1 that was discussed with Mr. Civie, I believe that you had
2 some discussion about Level 3 results after the Lake
3 Road/Card line was put in. And I think there was some
4 reference to Table 6-5 and 6-6?

5 MR. OBERLIN: That's correct.

6 MR. MACLEOD: But it seemed to me that you
7 wanted to say something about Table 6-10 as part of your
8 response, and I'm not sure that you ever got that out.

9 MR. OBERLIN: That's correct. What -- all
10 I was trying to get to was that as we were talking about
11 the different overloads on the system -- when we were
12 talking earlier -- when we were comparing Table 6-5 and
13 6-6, there is no appreciable difference in the results as
14 a result of the addition of the Card to Lake Road line.
15 But I think what's important is to understand that if you
16 go to page 39 of that same report, Table 6-10 has the
17 system results without the new Card/Lake Road line
18 present. There is no Table 6-11, which is where the
19 overloads would have been placed. That's because that
20 line has eliminated all of the overloads. So there are
21 additional issues that -- system issues that are being
22 addressed with the addition of the Card/Lake Road line.

23 MR. MACLEOD: And lastly, I think that you
24 may have concluded your testimony this morning with your

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1 recollection of what the years of need were for various -
2 - of the three areas that were studied. I think you
3 said, for example, that Rhode Island was immediate, and I
4 think you said that west to east was 2016 and that east
5 to west was about 2017. Do you recall saying something
6 to that effect?

7 MR. OBERLIN: I did. And I also said
8 those numbers were from memory. And I've actually looked
9 up the section in the report. Those numbers --

10 MR. MACLEOD: Which report is that?

11 MR. OBERLIN: That's what I was going to
12 say. Those numbers were from the 2011 assessment and not
13 the 2012 assessment. I stated that in the 2012
14 assessment we did not go back and specifically chase down
15 the year of need for each of the items.

16 MR. MACLEOD: Are you familiar enough
17 based on the 2012 follow-up to have an opinion as to what
18 the year of need is based on your most recent analysis
19 for each of the three areas studied?

20 MR. OBERLIN: Yeah. I wouldn't expect --
21 if we look first west to east, I would not expect a
22 substantial change in the results for the year of need
23 from what we had previously in the 2011 assessment. We
24 now know that the Salem Harbor site is being retired.

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1 The other thing that happened in that assessment was
2 there was some industrial load, specifically paper mill
3 load up in Maine, which was not accurately represented in
4 our models. An accumulative factor of that is you're
5 adding I want to say about a thousand megawatt of
6 additional load essentially to the way the network sees
7 it that has to be served from western New England. So I
8 think even though we've accounted for energy efficiency
9 and things like that, I would not expect a big shift in
10 that --

11 MR. MACLEOD: That's west to east?

12 MR. OBERLIN: That was west to east,
13 that's correct. If you flip it and you go east to west -
14 -

15 MR. MACLEOD: Well let me -- let me ask
16 you again just to state what the year is then --

17 MR. OBERLIN: Well the --

18 MR. MACLEOD: -- does it remain at 2016?

19 MR. OBERLIN: I'm trying to find my place
20 in the report again. Give me one second.

21 (pause)

22 MR. OBERLIN: Okay. Eastern New England -
23 - actually, the eastern New England information, a lot of
24 it was showing -- I'm looking at page 1 of the solutions

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1 assessment, which was published roughly February of 2012,
2 that has that there were needs actually as early as 2011.
3 I wouldn't expect that to have a significant shift.

4 And then if we flip it, it also goes on to
5 say that western New England had a need --

6 MR. MACLEOD: I'm sorry. Flip it, meaning
7 now you're going --

8 MR. OBERLIN: Flip --

9 MR. MACLEOD: -- east to west?

10 MR. OBERLIN: Yep.

11 MR. MACLEOD: Okay.

12 MR. OBERLIN: Okay. And we look at --

13 MR. TAIT: You still didn't get the year
14 you were looking for.

15 MR. MACLEOD: Okay. Could you repeat the
16 year that -- going back to west to east, could you state
17 again what that year was, the year of need?

18 MR. OBERLIN: The report says 2011. And I
19 don't think there's a significant change in our
20 assumptions which would have caused that to shift very
21 much.

22 MR. MACLEOD: Okay. You had said, I
23 thought earlier this morning, that west to east was 2016.
24 Are you saying now it's more --

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1 MR. OBERLIN: The report has 2011.

2 MR. MACLEOD: Okay, thank you. And now
3 east to west?

4 MR. OBERLIN: East to west, the report has
5 2017 and 2018. I would expect that also to remain the
6 same. And part of what's going on here is we had a bunch
7 of -- some units which are now going into repeated D
8 lists. Bridgeport Harbor 2 is one of them. AES Thames
9 has essentially packed up their machine and taken it to
10 South America or something like that. So we've had some
11 loss of resources in the east. So although Connecticut,
12 you know, has been very active in procuring resources, we
13 are seeing some things cutting the other way, actually
14 decreasing resources available. We have included the NRG
15 efficiency program. So what's interesting about what
16 that does to the year of need is you actually have a very
17 small net gain of load in western New England each year.
18 And when you get to the outer years, you're only looking
19 at about 60 megawatts of net increase in load in western
20 New England. So in order to resolve the reliability
21 concern by reducing the load, since we had a very small
22 addition of a net load, you actually have to come back
23 quite a few years in order for that to line up. So I
24 think you'd still be right around the 2017 time frame for

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1 that need.

2 MR. MACLEOD: Okay. And Rhode Island?

3 MR. OBERLIN: Rhode Island is immediate.

4 That's --

5 MR. MACLEOD: Okay --

6 MR. OBERLIN: -- that needs to get

7 resolved.

8 MR. MACLEOD: Thank you. I have nothing
9 further. Thank you.

10 CHAIRMAN STEIN: Okay, thank you. We'll
11 now go to -- (pause) -- there's no extra -- you don't --

12 MR. V. CIVIE: (Indiscernible) --
13 redirect?

14 CHAIRMAN STEIN: There's -- can I ask --
15 ask our counsel because I don't -- I do not --

16 (pause)

17 CHAIRMAN STEIN: Okay, if you -- if you
18 want to ask us something, you have to go to the
19 microphone because when you're standing out there, it
20 doesn't get covered at all. And I -- I will ask -- well
21 let's see what your request is.

22 (pause)

23 MR. V. CIVIE: Sure. Basically to cross
24 on redirect.

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1 MR. MACLEOD: This is not normal procedure
2 I don't believe. Just --

3 CHAIRMAN STEIN: I'm going to ask the
4 staff attorney, Miss Bachman, to respond.

5 MS. BACHMAN: Ordinarily we would not
6 allow cross-examination on redirect, Mr. Civie.

7 MR. V. CIVIE: Okay.

8 MS. BACHMAN: Do you have several
9 questions or are you --

10 MR. V. CIVIE: Yes.

11 MS. BACHMAN: Okay.

12 CHAIRMAN STEIN: Several --

13 MR. V. CIVIE: That's fine. I bring it up
14 at another time.

15 CHAIRMAN STEIN: Well there may not be
16 another time, so go ahead. Let's just do it.

17 MR. V. CIVIE: In reference to Table 10,
18 how would not having the new proposed Lake Road to Card
19 Street line change the results of Table 10?

20 MR. MACLEOD: Needs analysis --

21 MR. V. CIVIE: In needs -- no, actually in
22 the solutions analyst that you were referring --

23 MR. MACLEOD: Thank you.

24 MR. OBERLIN: I'm assuming you're meaning

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1 Table 6-10?

2 MR. V. CIVIE: Correct, 6-10.

3 MR. OBERLIN: Table 6-10 is without the
4 Card/Lake Road line --

5 MR. V. CIVIE: Mmm-hmm --

6 MR. OBERLIN: -- so the overloads that you
7 see there are what happens if that line is not
8 constructed.

9 MR. V. CIVIE: Mmm-hmm.

10 MR. OBERLIN: When I responded to the
11 question earlier, there is no Table 6-11 because the
12 addition of that line eliminates the overloads in this
13 table.

14 MR. V. CIVIE: The amount of current
15 though coming from both lines, that is the amount of
16 total current that you need, that total capacity can be
17 accommodated by the 330 line, correct?

18 MR. OBERLIN: You will see that the
19 initiating outage is the 330 line. So when something is
20 out of service, it cannot carry current. So no, it
21 cannot carry the current that's necessary --

22 MR. V. CIVIE: Alright --

23 MR. OBERLIN: -- if it's out of service.

24 MR. V. CIVIE: So what you're saying is

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1 this whole study was just assuming that 330 line was out.
2 If that 330 line was put in, there would be no
3 violations, there would be all the benefits of this
4 project to any state, and there will be no decrease in
5 any possible or conceivable advantage to the project,
6 correct?

7 MR. OBERLIN: I disagree. The first
8 statement was that the whole study was done with the 330
9 out of service, and that is not correct. We looked at a
10 number of initial lines out, plus additional
11 contingencies.

12 The second is NERC, NPCC, and ISO New
13 England criteria require us to evaluate two contingencies
14 deep. The 330 in this case is the first contingency.
15 And then Table 6-10 shows what the second contingency is.
16 I'm required to do this by criteria. I can't ignore it.

17 MR. V. CIVIE: Well you can choose the
18 lines though, can't you?

19 MR. OBERLIN: No, I cannot.

20 MR. V. CIVIE: Alright. So you've knocked
21 out -- you've disengaged the 330 line. So basically
22 though -- that wasn't my question. My question was if
23 the 330 line was in place, then all of the benefits of
24 this project in any state would be realized, correct?

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1 There will be no additional -- well answer that first.

2 MR. OBERLIN: I -- can you rephrase the
3 question? I don't --

4 MR. V. CIVIE: Sure. So let's say we
5 didn't put the new Lake Road to Card Street line in. We
6 just kept the existing 330 line in service. If we keep
7 that existing 330 line in service, the results of the
8 thermal violations, the results -- all the benefits that
9 this project is supposed to have, it will still have
10 them?

11 MR. MACLEOD: I'm going to object on the
12 basis that Mr. Civie is assuming a hypothetical that
13 doesn't exist here. He's changing the parameters of the
14 studies that have been conducted, and it's not really
15 cross-examination on the study that's before the
16 Council.

17 MR. V. CIVIE: Well actually this goes to
18 the validity of the study. By taking that 330 line out,
19 the line was supposed to be studied, I don't see the
20 point --

21 MR. MACLEOD: I think the witnesses have
22 both indicated they have to consider this as one of the
23 contingencies in the study.

24 CHAIRMAN STEIN: I think we should go on.

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1 MR. V. CIVIE: Alright. No -- and I was
2 done. That's it.

3 CHAIRMAN STEIN: Thank you. Okay. I
4 think we'll make it about a two-minute break and we'll
5 allow United Illuminating to come up to the -- and you
6 gentlemen can move.

7 MR. V. CIVIE: Thank you very much.

8 MR. MACLEOD: Thank you, Mr. Chairman.

9 (pause)

10 CHAIRMAN STEIN: United Illuminating.
11 Attorney McDermott.

12 MR. BRUCE MCDERMOTT: Good afternoon, Mr.
13 Chairman. Thank you. Bruce McDermott on behalf of the
14 United Illuminating Company.

15 We have one witness, Richard Peters, who
16 is the Associated Vice President for Transmission from
17 UI.

18 We have I think just one exhibit to
19 introduce, which are the company's responses to the CSC
20 Interrogatories, dated August 13, 2012.

21 CHAIRMAN STEIN: So we'll start with the
22 swearing in by -- Attorney Bachman.

23 MS. BACHMAN: Please raise your right
24 hand.

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1 (Whereupon, Richard Peters was duly sworn
2 in.)

3 MS. BACHMAN: Thank you.

4 CHAIRMAN STEIN: Do you want to go through
5 the verification of your one exhibit?

6 MR. MCDERMOTT: I do. Thank you. Mr.
7 Peters, did you prepare or assist in the preparation of
8 UI's interrogatory responses dated August 13, 2012?

9 MR. RICHARD PETERS: Yes, I did.

10 MR. MCDERMOTT: And do you have any
11 changes or additions to those responses?

12 MR. PETERS: No, I don't.

13 MR. MCDERMOTT: And do you adopt them here
14 today?

15 MR. PETERS: Yes, I do.

16 MR. MCDERMOTT: Thank you. I move those
17 be admitted into evidence. And the witness is available
18 for cross-examination.

19 CHAIRMAN STEIN: Is there any objection by
20 any of the parties or intervenors? Hearing and seeing
21 none -- I assume that wave did not mean you have an
22 objection -- it's admitted.

23 (Whereupon, United Illuminating Exhibit
24 No. 2 was received into evidence.)

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1 CHAIRMAN STEIN: We'll start with staff.

2 Do you have --

3 MS. WALSH: No questions, Mr. Chairman.

4 CHAIRMAN STEIN: Okay. Professor Tait.

5 MR. TAIT: No questions.

6 CHAIRMAN STEIN: Senator Murphy.

7 MR. MURPHY: No questions, Mr. Chairman.

8 MR. ASHTON: No questions, Mr. Chairman.

9 Thank you.

10 CHAIRMAN STEIN: Dr. Bell.

11 DR. BELL: Thank you, Mr. Chairman. My
12 question is are -- are UI customers assessed -- going to
13 be assessed for the IRP?

14 MR. MCDERMOTT: Dr. Bell, by assessed you
15 mean will they --

16 DR. BELL: Will --

17 MR. MCDERMOTT: -- pay towards the
18 construction costs of the --

19 DR. BELL: -- they pay a portion of the
20 construction costs of the IRP?

21 MR. PETERS: The UI customers will pay in
22 the same proportion as the rest of the ratepayers in New
23 England, like any regional ratepayer. I think it's
24 expected that nearly all the costs would go into regional

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1 rates. And so we would pick up a share like a ratepayer
2 in Maine would or any place else.

3 DR. BELL: Okay. I realize that was not
4 connected to the immediate material we have in front of
5 us, but I think it's a fair question in the context.

6 I have a question about a statement made
7 in one of your answers -- I'm sorry, I don't -- (pause) --
8 -- I've got it -- it's in -- the answer to Question No. 3;
9 the decision of the companies to work cooperatively on
10 the NEEWS project was based on the belief that -- (pause)
11 -- yeah -- the decision of the companies to work
12 cooperatively and so forth. My question is this; I don't
13 understand how UI and CL&P are working together in the
14 usual sense of working together in this matter simply of
15 co-owning an asset or UI owning a share of a larger asset
16 that belongs to CL&P. To me it's -- that's not something
17 I would usually call working together. But maybe in your
18 -- in the way you've answered this question, maybe you do
19 mean it, working together.

20 MR. PETERS: In addition to UI ultimately
21 owning a portion, at least upon transfer, UI does provide
22 support or resources as requested by CL&P. For example,
23 if CL&P needed assistance with siting work or
24 environmental work, or things like that, or support in a

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1 forum like this for example to assist with testimony and
2 things like that, in the agreement that relates to the
3 transfer to assets, it specifies that they can request
4 those resources or that assistance, and UI would provide
5 that assistance. So it's more than just transfer of the
6 assets. It's an exchange, we also help with the project
7 as needed.

8 DR. BELL: I see. So -- so you could be
9 qualified to testify on this project in sort of general
10 knowledge. As transmission owners, your planner could --
11 or planners could make statements supporting CL&P's
12 statements about the need for a project or something of
13 that sort regarding general loads in Connecticut or
14 something like that?

15 MR. PETERS: Well potentially. But in the
16 agreement I believe -- I'd have to go back and look at
17 the details, but I believe the agreement didn't focus so
18 much on us providing planning assistance, like true
19 transmission planning, but rather in areas -- I think I
20 gave some examples such as siting, environment, etcetera.
21 So I think more likely we would in those areas as opposed
22 to the kind of core transmission planning. But I would
23 have to look at the agreement to be sure, but I believe
24 that's true.

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1 DR. BELL: Okay, fair enough. I have just
2 one more question. In your answer to Question 2, you say
3 the parties further agreed that the specific group of
4 overhead line assets to be considered should be collected
5 -- selected in an impartial manner. And then you say the
6 impartial -- skipping a sentence -- the impartial manner
7 chosen is as described in Section 3-0 of the agreement.
8 Now 3-0, which I have in front of me, is entitled
9 Mechanics of Transfer of UI Assets. It doesn't say
10 anything about the selection of UI assets, impartial or
11 otherwise. So my question is can you point me to the
12 place in 3-0 where you describe this impartial manner of
13 selection?

14 MR. PETERS: If you'll bear with me for
15 just one moment, I don't have it handy, but -- (pause) -
16 -

17 CHAIRMAN STEIN: There's an example of
18 cooperation right there -- (laughter) --

19 MR. MCDERMOTT: And that was totally not
20 planned.

21 MR. ASHTON: Either that or fee splitting,
22 which is it -- (laughter) --

23 A VOICE: No way.

24 (pause)

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1 MR. PETERS: Okay. I think I found the
2 answer to your question, I apologize. It's a little bit
3 deep in the paragraph, but if you get down about, oh,
4 maybe half or two-thirds of the way deep into this very
5 lengthy paragraph, what you'll see is a description there
6 where the -- one party says well, you know, we estimate
7 that UI's portion of the assets would be a certain
8 amount, let's say in dollars, but what NU though would do
9 is they would then forward to UI a list of assets that's
10 far in excess of the amount that would be needed to
11 satisfy UI's portion. So for example, I believe in here
12 -- I don't have the exact word, but I think in there it
13 says double for example. And then UI would select from
14 that list an amount also in excess of what UI needs,
15 let's say one and a half times. And then from that list,
16 then UI would come back -- or CL&P would come back and
17 select from the list we sent them, the 1 X -- the 1.0 X,
18 the amount that UI is supposed to get.

19 Now the idea of that -- the reason that
20 that is referred to as an impartial approach is by NU
21 sending UI an amount let's say double what UI needs and
22 us selecting one and a half and then them selecting one,
23 that's very helpful because -- not that anybody would
24 want to do this -- but let's say that one of the parties

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1 wanted to game it somehow and get -- try to get the other
2 party to have less desirable assets or more troublesome
3 assets or something, that by starting off with a much
4 bigger pool than was needed and then going to the other
5 party and whittling that down not to the 1 X but to still
6 a bigger amount and sending it back to the other party
7 and letting the first party get it down to the actual 1.0
8 X amount, that helps to make it more impartial where
9 somebody wouldn't try to -- as I say game it somehow and
10 give one party or the other the less desirable or keep
11 the more desirable or things like that. So that portion
12 there that I described that's about two-thirds of the way
13 down the page where it goes back and forth, that's what
14 that is referring to in that impartial process.

15 DR. BELL: Okay. And does it contemplate
16 -- how many iterations of this does it contemplate?

17 MR. PETERS: Well I think it's just the
18 three I mentioned.

19 DR. BELL: Just the three?

20 MR. PETERS: Yeah --

21 DR. BELL: Okay --

22 MR. PETERS: -- I believe it is. It's --
23 I realize it's very detailed there. The other --

24 DR. BELL: Well I have a different

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1 pagination from you --

2 MR. PETERS: Oh, okay --

3 DR. BELL: -- so I can't -- you know, I
4 can't immediately find it. But that's okay, I get the
5 concept just fine and --

6 MR. PETERS: Yeah. And one other thing on
7 that was the idea too that because the life of the assets
8 is very long, we would also try -- it made sense to us to
9 try to have only assets that would be sort of self-
10 contained, so you wouldn't end up with an asset that was
11 fractionally owned, like a poll that's 22 percent one
12 party and 78 the other or something. That would be a
13 problem probably or potentially a problem. So we tried -
14 - I believe there's language in there also that says we
15 tried to focus on self-contained assets; for example,
16 actual lines, you know, as opposed to say a substation.
17 So that was another aspect of it.

18 DR. BELL: Alright, thank you.

19 MR. PETERS: Okay.

20 DR. BELL: Those are my questions, Mr.
21 Chair.

22 CHAIRMAN STEIN: Okay. Mr. Lynch.

23 MR. LYNCH: Mr. Chairman, I have no
24 questions, but I would like to say hello and recognize

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1 Miss Randall sitting in the back. We have not seen you
2 in a long time. Welcome back.

3 MS. LINDA RANDALL: Thank you, Mr. Lynch.
4 That's the problem with getting older, that I send people
5 like Mr. McDermott -- (indiscernible) -- it's delightful
6 to see you all too.

7 CHAIRMAN STEIN: Unfortunately your very
8 nice comments don't quite make it into the record since
9 there wasn't a microphone, but those of us who
10 unofficially heard them, appreciate them I'm sure.

11 Mr. Wilensky? Professor Tait, do you have
12 any -- I'll give you another shot -- okay.

13 Alright, we'll now go to cross-examination
14 by -- no you can't leave yet -- by the Applicant CL&P.

15 MR. FITZGERALD: No questions, Mr.
16 Chairman.

17 CHAIRMAN STEIN: NRG Companies?

18 A VOICE: No questions.

19 CHAIRMAN STEIN: The Civies.

20 MR. V. CIVIE: No questions, Mr. Chairman.

21 CHAIRMAN STEIN: EquiPower Resources?

22 Edward Hill Bullard? The Office of Consumer Counsel?

23 Richard Cheney and the Highland Ridge Golf Course? Mount

24 Hope Montessori School? ISO New England?

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1 MR. MACLEOD: No questions, Mr. Chairman.

2 CHAIRMAN STEIN: Okay. Now you can --
3 thank you very much.

4 MR. MCDERMOTT: Thank you.

5 CHAIRMAN STEIN: Unless you have any
6 redirect, which I guess you don't.

7 (pause)

8 CHAIRMAN STEIN: I understand now that the
9 Applicant will bring up your needs panel. Mr. Civie will
10 come up to cross-examine -- the needs -- your needs
11 panel?

12 MR. FITZGERALD: Oh, yeah, sure. We'll
13 bring them right up.

14 (pause)

15 CHAIRMAN STEIN: And just to remind
16 everybody that -- for most of us we've gone through the
17 cross-examination of this particular panel, but I believe
18 Mr. Civie was on vacation when they came, so we're giving
19 you --

20 MR. V. CIVIE: I'm not sure I'd categorize
21 it as a vacation, however --

22 CHAIRMAN STEIN: Well, I --

23 MR. V. CIVIE: -- I appreciate it and --
24 and I did read actually what went on at that hearing.

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1 CHAIRMAN STEIN: Okay. And my
2 understanding -- Attorney Fitzgerald, your people have
3 all been sworn in, so we don't have to --

4 MR. FITZGERALD: Yes, that's correct,
5 they've -- they've all been sworn in and they've all
6 testified.

7 CHAIRMAN STEIN: Okay. So with that,
8 we'll --

9 COURT REPORTER: One moment please.

10 (pause - tape change)

11 COURT REPORTER: Okay. Thank you.

12 CHAIRMAN STEIN: Go ahead, Mr. Civie.

13 MR. V. CIVIE: Two questions. I'll be
14 brief. First of all, are you familiar with any special
15 protection in Mystic or Wood River?

16 MR. TIMOTHY LASKOWSKI: There are no --
17 none in place at this time.

18 MR. V. CIVIE: Thank you. In regards to
19 generation do you know what the figures were for the
20 study -- that is the 2012 follow-up analysis study, do
21 you know what the figures were for Connecticut power
22 demand?

23 MR. LASKOWSKI: There was -- what the ISO
24 presented earlier when they showed Table 7-2 of the needs

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1 report on page 46, at the bottom of the page, the 8,600
2 megawatts.

3 MR. V. CIVIE: So we're going to go with
4 the 8,600?

5 MR. LASKOWSKI: Yes.

6 MR. V. CIVIE: Alright. What about the
7 total generation?

8 MR. FITZGERALD: You mean the total
9 generation in Connecticut?

10 MR. V. CIVIE: In Connecticut.

11 MR. LASKOWSKI: I didn't sum that up.

12 MR. V. CIVIE: Okay. That's fine. And my
13 last question would be the total generation at the time
14 the violations occurred, and I'm assuming you didn't sum
15 that up either, correct?

16 MR. LASKOWSKI: That's correct.

17 MR. V. CIVIE: Alright. Well then no
18 further questions.

19 CHAIRMAN STEIN: Thank you.

20 MR. ROGER ZAKLUKIEWICZ: Those are in the
21 table.

22 MR. V. CIVIE: Thank you.

23 MR. FITZGERALD: Go ahead.

24 MR. ZAKLUKIEWICZ: Mr. Civie, if you were

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1 asking a question about all generation, are you speaking
2 about all of New England?

3 MR. V. CIVIE: No, just Connecticut.

4 MR. ZAKLUKIEWICZ: Because I was going to
5 say in Table 3-9 and one of the other tables has the
6 eastern flow. All the remaining New England generation
7 resources are given in that table --

8 MR. V. CIVIE: I -- I'm familiar with that
9 -- right -- I'm familiar with that table. I just wanted
10 to compare what they used for the study, just to compare
11 to what this Council presented -- or presents in Appendix
12 A. And obviously that's not going to be possible, so.
13 Alright, thank you.

14 MR. ZAKLUKIEWICZ: Table 3-10 has the
15 Rhode Island reliability, all the generation listed in
16 that Table 3-10, page 26.

17 MR. V. CIVIE: It has Connecticut also?

18 MR. ZAKLUKIEWICZ: It does not break it
19 out. It just sums up all the remaining generation --

20 MR. V. CIVIE: Right --

21 MR. ZAKLUKIEWICZ: -- in New England that
22 is on.

23 MR. V. CIVIE: Right. No, I understand
24 that. I appreciate that.

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1 CHAIRMAN STEIN: Is that -- okay. We're
2 going to then close this portion of the hearing. We're
3 going to resume on Thursday. And you're going to be
4 ready for Thursday?

5 MR. V. CIVIE: We'll be ready for
6 Thursday.

7 CHAIRMAN STEIN: Alright.

8 MR. V. CIVIE: I appreciate that.

9 CHAIRMAN STEIN: And also there are
10 others. We're going to begin Thursday, October 30th, at
11 11:00 a.m., and we will begin with -- that meeting with
12 Mr. Bullard and then we'll go through the other parties,
13 including yourself.

14 MR. V. CIVIE: Okay. Thank you.

15 CHAIRMAN STEIN: So we'll see everybody on
16 Thursday.

17

18 (Whereupon, the hearing adjourned at 3:05
19 p.m.)

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